



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY, {
(INCORPORATED.)

VOL. VII.

CHICAGO, ILLINOIS, JANUARY 15, 1889.

No. 7.

{ SUBSCRIPTION PRICE,
ONE DOLLAR PER ANNUM.

ELEVATORS OF THE DULUTH ELEVATOR COMPANY AT WEST SUPERIOR, WIS.

West Superior, Wis., enjoys the distinction of having a larger grain elevator system than any other city of its size in the world. It was but two or three years ago that West Superior had nothing but a depot and a few scattering frame houses, while now it has a population of 8,500 and its coal docks and elevators represent an annual business of over \$10,000,000. In 1887 21,000,000 bushels of grain were shipped from West Superior and Duluth. Last year West Superior shipped 5,573,416 bushels. West Superior has many things to favor it becoming a great port and especially a great grain center, among which its location at the west end of the great chain of lakes; its harbor, the best on the lakes, and its splendid system of railroads figure prominently.

The city has an elevator capacity of 8,300,000 bushels. The Great Northern A and X, the property of the Eastern Minnesota Railway Company, having a capacity of 3,300,000 bushels and the elevators of the Duluth Elevator Company, an illustration of which is given on this page, have a capacity of 5,000,000 bushels. The Duluth Company's system is claimed to be the largest, best equipped and most complete elevator plant in the world.

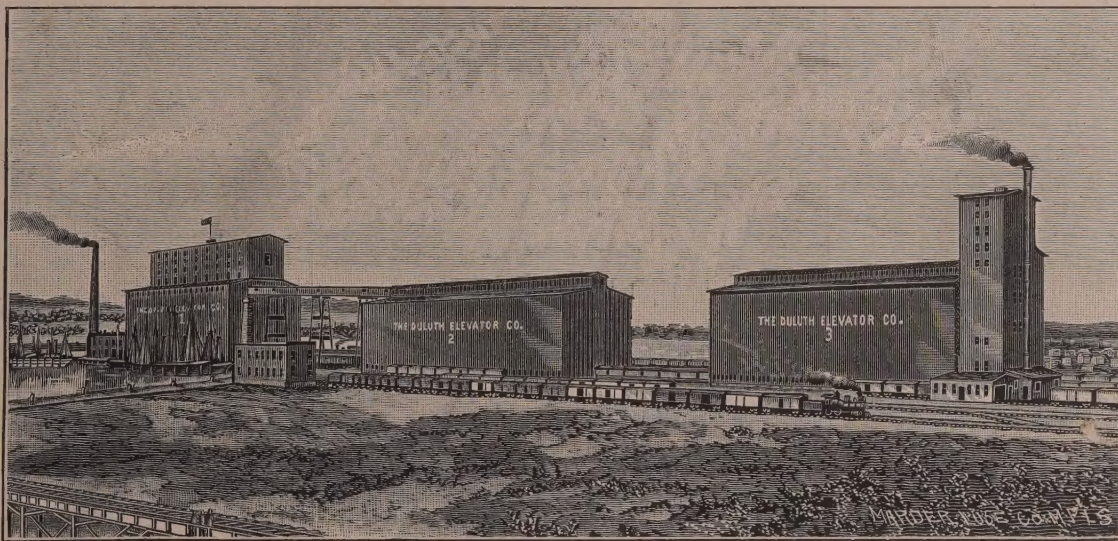
The Duluth Company's system consists of three separate and distinct houses numbered 1, 2 and 3. The first is a timber crib construction elevator, iron-clad and steel roofed with a two-story brick, metal roofed engine and boiler room. A solid brick wall separates the elevator from the engine room and the only opening in the wall is where the shaft goes through and it is tightly encased. There is an open stairway at each end of the building and a passenger elevator at the south end. The building is 227x84 feet and 141 feet high and has a capacity of 1,000,000 bushels. It is surmounted by a cupola of five stories;

the first two are spout floors; the third the scale floor; the next the garner floor and the top the machinery floor.

The machinery consists of twelve stands of elevators, six Howes & Ewell No. 8 Eureka Grain Cleaners on the first floor, the dust from which is discharged into the water. All the elevators are supplied with cast iron pulleys at the top and base and an iron boot at the foot. The shafting used is connected with jaw-couplings, and ventilated iron and iron friction clutches are used for throwing all machinery in and out of operation.

Pump in the engine room also has hose connections so that it can be used in case of fire. There are several vertical standpipes running to the top floor and three horizontal pipe lines extending the length of the building. Thirteen valves in this system of pipes are each supplied with fifty feet of hose. Besides this fire protection the elevator is fully equipped with Grinnell's Automatic Sprinklers, over a thousand of them being placed about the building. These are supplied with water from a steel pressure tank on the top floor and also by a pipe direct from the pump house.

House No. 2, which is 350 feet south of No. 1, is 468x88 feet and 77 feet high. Like No. 1, it is of timber crib construction and iron clad with steel roofing. The building contains seventy eight flat-bottomed bins 55 feet deep which have a capacity of 2,000,000 bushels. The only machinery in this building are two belt conveyors driven from machinery in No. 1. One in the upper part of the building is used for carrying grain from No. 1 to the storage bins of No. 2, and the other



ELEVATORS OF THE DULUTH ELEVATOR CO AT WEST SUPERIOR, WIS.

The power for driving the machinery on the top floor is transmitted by a heavy rubber belt from the engine shaft to a horizontal line shaft which extends the entire length of the building on the top floor and drives the six elevators on the east side of the building. Six elevators on the other side of the building are driven by a link belt from this horizontal shaft. All shafting used is connected with jaw-couplings, and is run in metal boxes lubricated by means of grease cups and solid mineral oil. There is a full equipment of wheat shovels, Fairbanks' scales, iron shipping spouts and all the other machinery which is requisite to a well equipped elevator. Three steel return tubular boilers, 5½ feet in diameter by 16 feet in length, supply steam for a vertical condensing Corliss engine of 500-horse power. In the engine room there is also a Buffalo Duplex Fire Pump, with an 8-inch suction and a 7-inch discharge pipe, which is connected with the Independent Fire Pump Station. A Hopkins Boiler Feed

at the bottom is used for carrying grain back to No. 1 for shipment. This building is supplied with two horizontal water pipes, one in the lower and one in the upper part. It is also fully equipped with the Grinnell Automatic Sprinklers.

An iron trestle work 350 feet long supports the two galleries which connect houses Nos. 1 and 2, and through which the belt conveyors pass. They are both built of iron and are fire proof. In each are placed thirty-five automatic sprinklers.

House No. 3 is in a direct line with the other two and lays 350 feet south of No. 2, of which it is really a duplicate, with the addition of an iron-clad elevating tower. The construction is the same. The same number of bins are constructed the same and have the same capacity. The building is 468x88 feet and 77 feet high, with a tower 48x48 and 121 feet high. The boiler room is 24x44 feet with a 12-inch brick wall between it and the tower. The

smokestack is 131 feet high and stands six feet away from the tower. The machinery consists of four stands of elevators, with iron pulleys at bottom and top, and iron boots driven by link chains arranged to be thrown in or out of gear; two sets of power shovels and four Howes & Ewell Grain Cleaning Machines, with Cyclone Dust Collectors. A boiler of the locomotive type supplies steam for a high pressure Corliss Engine on the ground floor of the machinery tower. Power is transmitted to the third floor by a belt and from there is distributed to the elevators, cleaning machines, shovels and carrying belts. In the boiler room there is a Smith-Valle Duplex Steam Fire Pump and a boiler feed pump with available hose connections. There is a vertical stand pipe in the tower with branches on each floor and hose attached at different places, besides 386 Grinnell Sprinklers placed about the building.

House No. 3 is connected with No. 2 by a tunnel 350 feet long, 12 feet wide and 18 feet high, through which grain is carried to No. 1 for shipment. Like the other galleries it is fire proof and protected by thirty-five automatic sprinklers.

All the buildings and galleries are well lighted by incandescent electric lights of sixteen candle power. The wires, lamp fixtures, lightning arresters, switches and cut-out boxes are put in in accordance with the rules and instructions of the Board of Fire Underwriters. In the pump house, which is about 125 feet south and 55 feet west of No. 1, is the dynamo. The pump house is a two-story brick structure 75x32 feet. The first floor is divided into a boiler and a pump room. In the first is a 100 horse power tubular upright Otis Steel Boiler of improved pattern. In the other are two Smith-Valle Duplex Steam Pumps, a 50 horse power Payne Automatic Engine driving a 300-light dynamo, a Clayton Air Compressor for the sprinkler system, the electric light switches, fire alarms, signal boxes and other appliances. The steam pumps are connected with a 12-inch water main, the branches of which are laid eight feet below the surface of the ground and connected with hydrants at different points about the grounds as well as on the inside of the buildings. The system was erected by J. T. Moulton & Son, elevator builders and architects of Chicago, and it is truly a most creditable piece of work. The system has a dock 850 feet long, track facilities for over 2,000 cars and an unloading capacity of forty cars per hour.

A. J. Sawyer is president of the company; W. H. Dunwoody, vice-president; Frank H. Peavey, treasurer; Charles T. Peavey, asst.-treasurer, and G. G. Baraun, secretary. Geo. D. Moulton, formerly of Chicago, the well-known elevator builder, is the superintendent.

INLAND MARINE INSURANCE FOR 1888.

The inland marine insurance business during the past year was better than any year since 1880, and the losses footed up only half as much as in 1887, which was an unusually bad year, especially during October and November. The principal disasters of the year were the grounding of the schooner W. I. Preston, which had no insurance on hull and only \$19,000 on the cargo, divided among several companies; the loss of the cargo of the schooner Pensaukee on which there was \$20,000 insurance distributed among different companies. The schooner Northwest, which is beached high and dry, has been abandoned to the underwriters and will probably be taken off in the spring. She was insured for \$23,500 on a valuation of \$35,000. The propeller M. M. Drake, whose cargo was a total loss of \$26,000, has been abandoned to the Chicago underwriters at \$45,000. The Starucca of Buffalo, carried no insurance on hull, but the cargo was insured with New York companies. These losses foot up about \$125,000.

Some of the insurance men claim that more money is paid out for wet and damaged cargoes, injuries to grounded vessels and other small damages than for the large disasters. Poor harbors have been a great source of danger to our larger vessels and a great many vessels were overloaded, some carrying double tonnage. This, of course, will never be stopped until Congress passes a law defining the "load line" and fixing a penalty for loading deeper.

An Iowa farmer builds his corn cribs so that the sides and ends are tight against the weather, but the bottom of the crib is of slats, and there is an air chimney or two in the roof, so that a current of air passing through the corn all the time prevents it from becoming mouldy.

CHICAGO'S GRAIN TRADE FOR 1888.

Taking everything into consideration Chicago's grain trade for the last year has been satisfactory. The falling off in the receipts and shipments of wheat caused by a short crop, was more than balanced by the large increase in the receipts and shipments of other grains. The receipts of corn increased about 33 per cent.; of rye about 300 per cent. above 1887, and oats also showed a large increase.

The receipts and shipments of wheat show an enormous decrease; the receipts were less than any year since 1872, when they amounted to 12,724,141 bushels. The shipments were less than any year since 1872, with the exception of 1883, when they amounted to 11,728,754 bushels. The receipts for the year were 13,183,360 bushels, against 21,411,249 bushels for 1887, and 16,103,418 bushels for 1886. The shipments were 12,156,826 bushels, against 26,850,576 bushels for 1887 and 15,642,055 bushels for 1886. This falling off in the receipts and shipments of wheat does not indicate that Chicago as a wheat market is on the decline, for as compared with other cities Chicago received its usual share. At the close of the year there were 4,659,313 bushels in store in the city, against 5,332,932 bushels on the last day of 1887, and 13,927,247 bushels on Dec. 31, 1886.

The trade in corn was good, both on speculative and shipping accounts. Erroneous calculations as to the supply led to some large deals, and the fluctuation in prices was very wide, declining from 60 cents in May to 33½ cents the last of December. The demand for export and the light supply in the East kept up an active shipping movement. The receipts were 70,150,302 bushels, which is the largest amount received any year since 1883, when 74,412,319 bushels were received, and larger than any year previous to that, save 1880 and 1881, when 97,272,844 bushels and 78,393,395 bushels respectively were received. The shipments were 69,590,022 bushels, and likewise the amount is only exceeded by the shipments of 1880, 1881 and 1883, when 93,572,934 bushels, 75,463,213 bushels and 71,656,508 bushels respectively were shipped. The amount in store at the close of the year was 1,669,610 bushels, against 1,285,984 bushels and 4,720,176 bushels for the same day of 1887 and 1886.

The trade in oats was better than for several years previous and the amount of receipts and shipments exceeded any previous year. The crop was estimated at 700,000,000 bushels, which is the largest crop ever reported and about 275,000,000 bushels in excess of the average for the last twenty years. The receipts were 52,083,771 bushels, against 45,306,277 bushels for 1887, and 39,977,315 bushels for 1886. The shipments were 41,001,285 bushels, against 37,148,221 bushels for 1887, and 32,164,208 bushels for 1886. The amount in store the last day of the year was 3,460,728 bushels, against 1,036,936 bushels for the same day of 1887 and 981,074 bushels for the last day of 1886.

There has been more trading in rye than for several years past, and at times there was considerable activity in the market. When wheat went up rye went up with it. The Agricultural Department gave the crop of 1888 at 25,000,000 bushels. The receipts were 2,672,018 bushels, against 847,009 bushels for 1887, and 936,547 bushels for 1886. The only previous years when the amount of the receipts were larger was 1879, 1883 and 1884, when 4,497,340 bushels, 5,484,259 bushels and 3,327,516 bushels respectively, were received. The shipments were 1,745,027 bushels, against 690,830 bushels for 1887, and 817,553 bushels for 1886. The shipments of 1878 and 1879 exceeded this slightly, and the shipments of 1883 and 1884 amounted to 3,838,557 bushels and 4,365,754 bushels. The amount in store at the close of the year was 774,249 bushels, against 30,000 bushels for the same day of 1887 and 152,124 bushels for the last day of 1886.

The trade in barley did not vary much from the last two years. The Department of Agriculture estimated the crop at 56,812,000 bushels. The receipts were 12,101,870 bushels, against 12,170,402 bushels for 1887 and 12,511,953 bushels for 1886, being much larger than any year previous to 1886. The shipments were in excess of any previous year, being 7,809,559 bushels, against 7,216,580 bushels for 1887 and 7,293,190 bushels for 1886. The amount in store at the close of the year was 203,373 bushels, against 352,331 bushels for the last day of 1887 and 303,024 bushels for the last day of 1886.

The Chief Inspector of Grain reports the inspection into store of 215,643 cars during the year. The inspection of grain received by lake and Illinois & Michigan Canal for the same period was as follows: Wheat, 194,867 bu.;

corn, 1,097,000 bu.; oats, 835,435 bu., and rye, 13,000 bu. Total, 2,141,202 bu.

The following was the inspection of grain into this city during the year by carloads, according to the daily postings:

Months.	Wheat.	Corn.	Oats.	Rye.	Barley.	Totals.
January.....	1,086	4,329	2,323	112	1,106	8,956
February.....	1,117	6,140	2,586	140	1,086	11,269
March.....	1,654	7,505	2,622	63	731	12,575
April.....	1,192	4,577	2,774	67	467	9,077
May.....	1,166	12,809	6,671	150	352	21,148
June.....	1,211	13,341	5,467	140	167	20,326
July.....	1,815	6,417	3,014	142	22	11,410
August.....	4,750	11,166	4,966	658	245	21,785
September.....	5,526	16,563	7,206	1,238	1,709	32,242
October.....	3,767	15,622	7,263	1,194	3,480	31,326
November.....	2,143	10,070	3,422	530	1,961	18,126
December.....	1,131	9,782	4,428	366	1,696	17,403
Totals.....	26,558	118,321	52,942	4,800	13,022	215,643
Totals 1887.....	41,045	84,329	45,831	1,548	15,622	188,375

THE NEW YORK PRODUCE EXCHANGE.

The trading in wheat at the Produce Exchange, taking the year of 1888 as a whole, was not quite so active as during the previous year, though it was a trifle more so than in 1886. The highest prices during the year were touched on Oct. 8, when No. 2 red, afloat, was quoted at \$1.21. The lowest range was current on June 25, when No. 2 red, afloat, sold at 87½c. The following tables are compiled from the official statistical statements of the New York Produce Exchange, and show the volume of business for the year 1888 of the principal commodities dealt in at that Exchange, with the figures of two previous years as comparisons:

	Flour, brls.	Wheat, bush.	Corn, bush.	Oats, bush.
January.....	256,075	66,561,000	13,365,000	7,471,000
February.....	245,335	76,167,000	23,264,000	7,495,000
March.....	275,095	96,038,000	31,333,000	6,175,000
April.....	303,455	123,221,000	21,180,000	7,310,000
May.....	269,783	171,833,200	20,775,000	6,616,000
June.....	231,875	89,043,000	34,767,000	7,055,000
July.....	339,660	125,286,000	43,859,000	6,654,000
August.....	305,365	263,522,000	36,159,000	7,661,000
September.....	363,350	157,868,100	36,150,500	8,129,000
October.....	251,487	224,505,200	30,255,800	6,573,000
November.....	209,625	114,954,000	22,975,000	7,495,000
December.....	163,395	49,203,000	16,988,000	6,931,000
Total.....	3,214,407	1,557,141,500	331,441,300	85,565,000

	Barley, bu.	Pork, brls.	Lard, tcs.	Tallow, tcs.
January.....	380,875	9,675	240,373	2,180,000
February.....	87,500	5,905	192,538	1,885,000
March.....	62,500	6,415	164,715	1,970,000
April.....	62,000	9,925	203,225	1,923,000
May.....	.....	9,300	159,840	2,151,000
June.....	.....	4,200	105,685	1,855,000
July.....	.....	5,500	95,587	1,775,000
August.....	26,100	4,350	109,935	1,605,000
September.....	.....	4,080	85,125	1,405,000
October.....	306,000	3,850	106,255	2,430,000
November.....	203,000	5,200	67,420	1,650,000
December.....	216,000	4,550	100,120	1,310,000
Total.....	1,543,975	72,950	1,630,779	22,141,000

The total figures for three years follow:

	1888.	1887.	1886.
Flour, brls.....	3,204,407	3,422,228	3,348,579
Wheat, bu.....	1,557,141,500	1,734,573,900	1,537,007,055
Corn, bu.....	331,441,300	276,437,800	250,765,000
Oats, bu.....	85,565,000	92,412,000	73,357,100
Barley, bu.....	1,543,975	2,214,750	1,218,300
Pork, brls.....	70,950	87,755	77,332
Lard, tcs.....	1,630,779	2,444,405	3,572,653
Tallow, tcs.....	22,141,000	22,148,000	19,055,000

RUST IN WHEAT.

Prof. J. Hoyes Panton of Guelph Agricultural College, Canada, who has investigated the causes of rust in wheat and other grains, makes the following conclusions:

1. Seasons are the chief cause of rust; sudden changes of temperature and rain, accompanied with close still weather are favorable to its increase.
2. Low-lying rich soils are most subject to attack.
3. An excessive use of manures, rich in nitrogen, encourage the disease.
4. Late sown grain is most subject to attack.
5. Thinly sown crops seem most liable to injury.
6. Red wheats are less affected than white varieties.
7. Rust is more common in the vicinity of Barberry hedges than at a distance.

The Omaha Herald is authority for the statement that a farmer near Hebron, Thayer county, Neb., harvested two crops from seventeen acres of ground this year—a crop of 490 bushels of rye, and one of buckwheat that netted him \$119.

KING CORN AT THE PARIS EXPOSITION.

The Committee on Grain of the New York Produce Exchange have under consideration a plan of a special exhibition of Indian corn in its various preparations as food and for use in the arts at the Paris Exhibition next year. The plan involves the erection of a separate pavilion, the columns, roof and chimney of which are to be made of corn fodder, while the exterior and interior will be completely covered with corn stalks and corn on the ear. Photographs of the country's corn exchanges, an immense map showing the districts under grain culture, and statistical charts showing the amount produced and the amount exported, will be displayed. The plan is to have the frieze over the columns and the two panels next to the towers formed of mosaics made of grains of varied colored corn. The national flags of the United States and

as human food; what we export is used mostly for feeding animals. If the inhabitants of Europe knew of the many uses to which corn can be put, there is no doubt but what the demand would be increased five hundred fold. Many new enterprises would result from the increased demand, and the producers, dealers, transportation companies and many others would be directly benefited, while the benefit to the country at large would be incalculable.

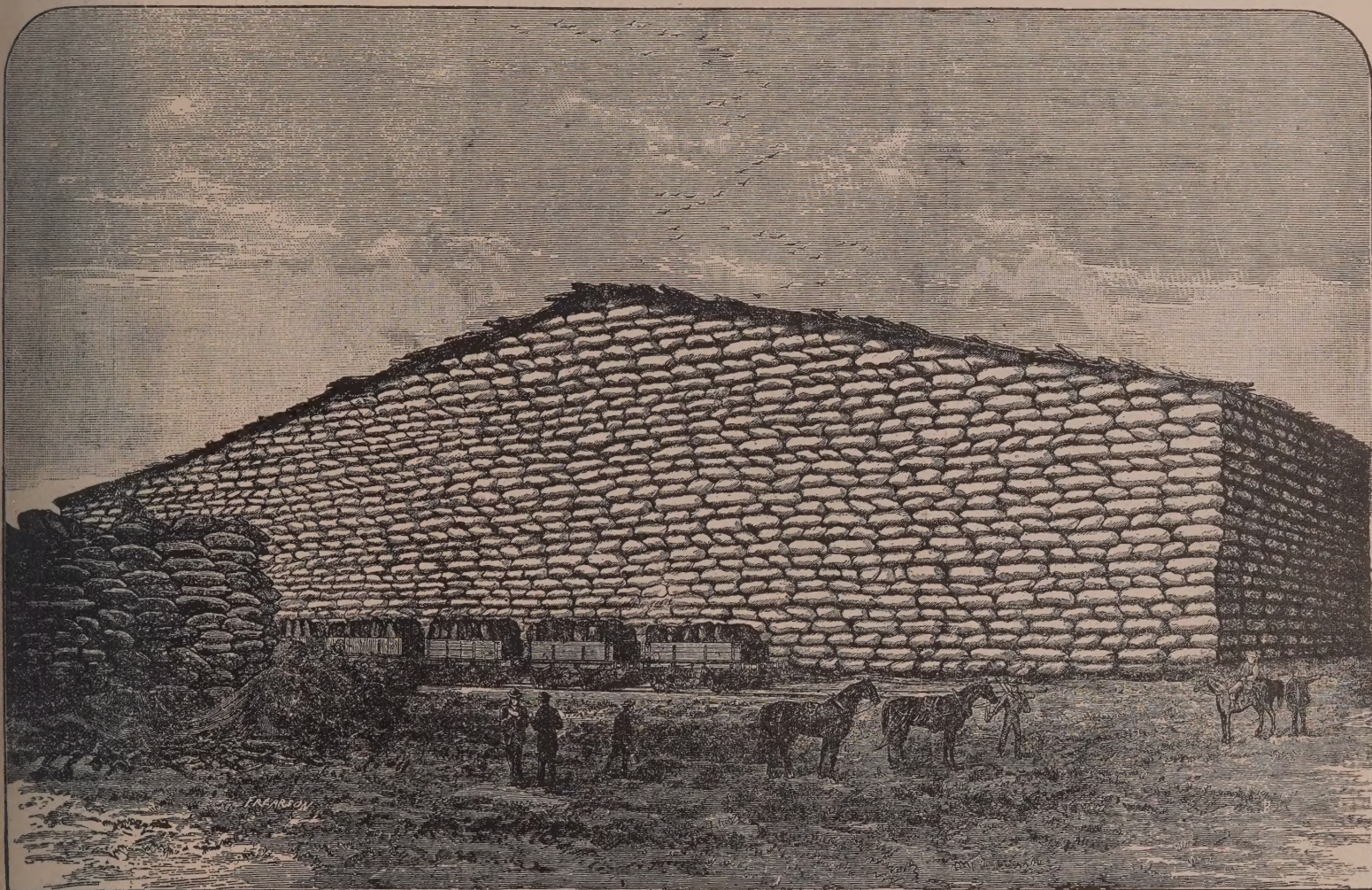
AN AUSTRALIAN WHEAT WAREHOUSE.

To our enterprising contemporary the *Farm Implement News* of this city, we are indebted for the cut on this page, which will be a novel view to most of our readers. In South Australia, where they raise immense quantities of wheat, and the railroad and storage facilities are limited,

THE UNION ELEVATOR AT COUNCIL BLUFFS.

The Union Elevator at Council Bluffs, Iowa, is probably one of the most complete elevators in the country, and contains first-class machinery throughout. The building contains sixteen bins 64 feet deep. Near the top of the elevators is the transfer department, where, in a little circle, are a number of spouts which can be placed so as to form 1,300 different combinations, and by adjusting them properly grain can be transferred from one part of the building to any other. On the same floor are sixteen grain cleaning machines, each of which is an elevator as well as a cleaner. It takes just thirty-five minutes to clean a car of grain. Mr. J. T. Horn has charge of this floor.

On the next floor above is the weighing department, which is supplied with forty-five sets of scales, each hav-



AN AUSTRALIAN WHEAT STACK, CONTAINING THIRTY-FIVE THOUSAND SACKS OF WHEAT.

France will be placed upon the two main towers, and streamers bearing the names of our great corn producing states will fly from the roof.

All the known preparations of corn will be prepared in an American kitchen supplied with American stoves and ranges so placed that the cooks will have to face the multitude as they do the cooking, the samples prepared to be distributed free of charge among the visitors. A ten-minute lecture on the merits, the mode of preparing and the healthfulness of corn as an article of food, will be given at the end of each hour. Pamphlets printed in English, French and German, fully describing how to prepare it, will be distributed.

The cost is estimated at \$30,000, and the good that it will do this country can not be estimated, but it will run way up into the millions. The Commissioner of Agriculture at Washington, in writing of the good to be derived from the exhibit, says: "There is not a railroad running through the great corn belt of the United States, not a produce exchange at our principal corn and export centers, that is not especially and directly interested as a beneficiary in this work. If carried out as you propose it will enhance the value of every acre of land in this corn belt."

At present very little corn is used in European countries

they sack and stack the grain as shown in the illustration. Farmers do this to some extent directly from the threshing machine; but it has been chiefly practiced by buyers at stations where there was not sufficient storage capacity for the grain accumulating and awaiting shipment. The stack shown in the engraving consisted of 35,000 bags, and was erected by Seikmann & Moule at Caltowie. In this country the mice and rats would soon play havoc with a stack of the kind—especially with the bags; although in early times immense piles of sacked grain used to lie at the depots for many days awaiting shipment, and probably they do now in California and in the Northwest during a rush for market.

Clarksby—"Good morning, Mrs. Gadby. Shopping, I see!" Mrs. Gadby—"Yes, I've been picking up a few little things for Christmas." C.—"I haven't seen Mr. Gadby 'on 'Change' lately." Mrs. G. (laconically)—"I have."—*Tid Bits.*

Bonds—"You got squeezed in the wheat smash, didn't you?" Stocks (dolefully)—"Yes, flat as a pancake." Bonds (cheerfully)—"That won't prevent you remembering Mrs. Stocks at Xmas, I hope." Stocks (grimly)—"Oh, no, indeed! She shall have a fine bear-skin muff this year."—*Lowell Citizen.*

ing a capacity of 42,000 pounds, and a separate set of shipper's scales, so that the transfer business is kept entirely separate from the company's purchase and sale business. Otto Hoxie has charge of this department, and keeps a full account of all the facts relating to the receipts.

The company handles considerable flax, and one day recently over 200,000 bushels were in the elevator bins. This is received from Nebraska and Dakota, the finest from the latter. For cleaning the seed they have what they call the "Keeley Motor," a machine which takes out the different kinds of seeds and puts them in different piles, leaving the flax free from all foreign matter.

The buildings have a perfect fire protection, and one man devotes his entire time to keeping it perfect. Alarm bells are all over the building, and barrels, buckets, and hand grenades are placed in different places about the building. The building is supplied with hose, and the engine is in constant motion, so that the pressure is always on, and it is almost impossible for fire to do much damage.

Formerly only fourteen men were employed in the elevator, but now they employ thirty-seven, and are running night and day; but still they cannot keep up with their business. The first of the month the elevator contained

over 600,000 bushels of grain, and they were shipping over 100 cars per day. The entire business done by the company in twenty-five Western towns is handled at the elevator, besides a vast amount of grain which is received from the West for transferring, and is reloaded and sent East. It only costs the company about 40 cents to unload a car of grain, whereas it used to cost about \$1.25.

Mr. O. H. Cook is superintendent, J. F. Conley has charge of the machinery, Carl Benson is engineer, E. E. Cook is assistant superintendent, John Driscoll is fireman, and C. Cochran has charge of the cars outside, H. W. Rodgers is president, and D. S. Barriger is vice-president of the company, B. S. Cochran is manager of shipments, D. S. Trall is head bookkeeper, and George Gould is billing clerk.

DECREASED YIELD OF GRAIN PER ACRE.

The newer states, with virgin soil, produce more grain and other crops per acre without being replenished by fertilizing than the older states. In all countries there are years of bad crops from climatic influences, and the United States is not an exception. The yield of wheat in the United Kingdom gives returns for a series of years at an average of about 29 bushels per acre, while in the United States the average wheat yield is less for a series of years than 14 bushels per acre, although in some of the states there is virgin soil. The general average yield of wheat in the United States in 1888 is given at 11 $\frac{1}{10}$ bushels, while the average yield in Washington Territory is 18 $\frac{1}{10}$ bushels, against 16 $\frac{1}{10}$ bushels in Oregon and 5 bushels average in the two Carolinas. The average yield in the state of New York in 1888 is 14 $\frac{1}{10}$ bushels, against 14 $\frac{1}{10}$ to 16 $\frac{1}{10}$ bushels in the New England states, 13 bushels in New Jersey, 13 $\frac{1}{10}$ bushels in Pennsylvania, 12 $\frac{1}{10}$ bushels in Delaware, 14 $\frac{1}{10}$ bushels in Maryland, 8 $\frac{1}{10}$ bushels in Virginia, 9 $\frac{1}{10}$ bushels in West Virginia. With proper fertilization the average wheat yield could be increased to more than double that of any previous year. The Southern states have a smaller wheat yield than those of the North and Northwest. The average wheat yield in 1888 in Georgia is 5 $\frac{1}{10}$ bushels, against 5 $\frac{1}{10}$ bushels in Alabama, 7 $\frac{1}{10}$ bushels in Mississippi, 11 $\frac{1}{10}$ bushels in Texas, 9 $\frac{1}{10}$ bushels in Tennessee, and 9 $\frac{1}{10}$ bushels in Arkansas. The winter wheat crop in 1888 was far less than the yield of most of the previous years, being 11 $\frac{1}{10}$ bushels in Kentucky and Ohio, against 14 $\frac{1}{10}$ bushels in Michigan, 11 $\frac{1}{10}$ bushels in Indiana, 13 bushels in Illinois, 12 $\frac{1}{10}$ bushels in Missouri, 14 $\frac{1}{10}$ bushels in Kansas, and 12 $\frac{1}{10}$ bushels in California.

The spring wheat states in 1888 had unpropitious weather, and the average output per acre is much smaller than usual, being 11 $\frac{1}{10}$ bushels average in Wisconsin, against 8 $\frac{1}{10}$ bushels in Minnesota, 10 $\frac{1}{10}$ bushels in Iowa, 10 $\frac{1}{10}$ bushels in Nebraska, 16 bushels in Nevada, and 9 $\frac{1}{10}$ bushels in Dakota.

The comparison of the yield of wheat in a year of generous output with a year of minimum output would scarcely be a fair comparison to show the decline in the business of wheat growing in the United States. The aggregate wheat yield of 1888 is about 405,000,000 or 410,000,000 bushels, about 100,000,000 bushels less than the maximum wheat crop of the country.

The corn crop of 1888 is probably the largest ever grown in the country, being about 2,000,000,000 bushels, or 32 bushels per acre. The maize crops since 1880 have been comparatively lean, excepting in 1885, when the yield was half a bushel per acre above the average.

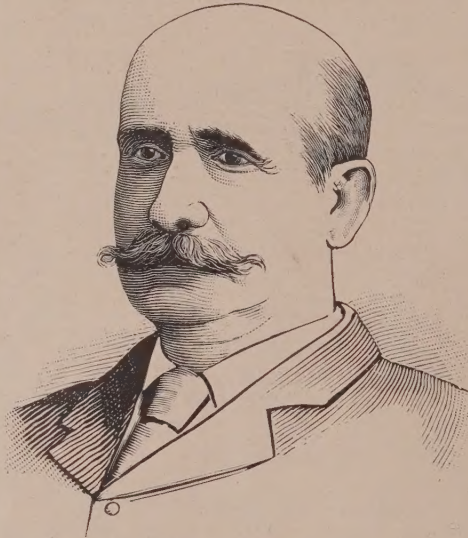
The yield in the Southern states in 1888 averages 11 bushels in North Carolina, against 9 bushels in South Carolina, 10 bushels in Florida, 13 bushels in Alabama, 19 $\frac{1}{10}$ bushels in Texas, 17 bushels in Virginia, 11 bushels in Georgia, 19 bushels in Delaware, 25 bushels in Maryland, 19 $\frac{1}{10}$ bushels in Arkansas, 21 $\frac{1}{10}$ bushels in Tennessee, and 26 $\frac{1}{10}$ bushels in Kentucky. Iowa is the banner corn state, in 1888 her average yield per acre being 37 bushels, against 29 $\frac{1}{10}$ bushels in Minnesota, 35 $\frac{1}{10}$ bushels in Ohio, 31 bushels in Michigan, 35 bushels in Illinois, 31 bushels in Wisconsin, 35 bushels in Indiana, 31 bushels in Missouri, 27 bushels in Kansas, 36 bushels in Nebraska, 28 bushels in California, and 25 bushels in Oregon. The average yield in the New England states is 18 $\frac{1}{10}$ to 31 $\frac{1}{10}$ bushels, against 31 bushels in New York, 32 $\frac{1}{10}$ bushels in New Jersey, and 32 $\frac{1}{10}$ bushels in Pennsylvania. There is no question but what the average yield of all cereals per acre in the United States could, by an improved system of cultivation and judicious fertilization, be largely augmented. In the wheat crop of

1888 the newer states have suffered from climatic conditions, as have some of the older states. The Southern states' wheat and corn crops this year, with smaller average yield than the Northern states, have found their crops less profitable than the staple crops, tobacco and cotton. —Bradstreet's.

THE NEW PRESIDENT OF THE CHICAGO BOARD.

William S. Seaverns, who was recently elected President of the Chicago Board of Trade, has been steadily working up to his present position for the last twenty five years. There was little opposition to his election, in fact no president of the Board has ever come so near to receiving the unanimous vote of the Board. Mr. Seaverns received 894 votes out of a total of 958. He has been a member of the Board since 1862, and his present position is only one step above his office under Mr. Hutchinson's administration, it being that of First Vice-President. He was Second Vice-President under A. M. Wright. Previous to that he was three years a director, two years a member of the Arbitration Committee, and two years one of the Committee on Appeals—all of which gives him a record of nine years of faithful service to the organization, of which he has been a member for a quarter of a century.

Mr. Seaverns is a member of the firm of I. N. Ash & Co., grain shippers and receivers. His entire career as a



WILLIAM S. SEAVERNS, ESQ.

member of the Board has been that of a typical representative of the strictly commercial life of the organization. He has been a conservative trader in options, but is much more a merchant than a speculator. His popularity has been won by his careful, often laborious, attention to the details of every question affecting the good name and prosperity of the Board which has come before him as an officer. The members have confidence in him, and the employees swear by him.

W. S. Seaverns is a cousin of George A. Seaverns, the elevator proprietor. He is forty nine years old. Both are natives of Roxbury, Mass., and came West in boyhood. Both started life in the grain business, and have made it pay. The new president is less of a social celebrity than his predecessor. He has two hobbies—one is his business and the other his family. He has a wife and three children, and lives pleasantly in Kenwood.

The Union Elevator at Omaha, Neb., handled 222 cars of corn one day recently. The same day Chicago received 393 cars.

Quite a novel case has been brought up in the Superior Court at Sacramento, Cal., in which a woman is charged with stealing about 30,000 pounds of wheat. The plaintiffs, Thomas J. and Alfred S. Chapman, allege that Mrs. Caroline McCauley, unlawfully and without their consent, took possession of 209 sacks of their wheat at Arno Station, disposed of the same and pocketed the proceeds. Mrs. McCauley has refused to return the wheat or to account for the value of it. The plaintiffs claim that the wheat was worth \$492.62, and they have asked that a judgment be given for this amount, together with \$50 expended in trying to recover the wheat, the costs of the suit, and such other relief as the court may deem equitable.

CHICAGO'S STORAGE CAPACITY.

At present Chicago has a grain storage capacity of over 31,000,000 bushels, which is probably as large as will be needed for some time to come, as many elevators have been constructed of late at country points, where the expense of holding is not so great as in this city. Then, too, the charges for storing grain have been reduced, and the stimulus that led to the building of elevators in former years has partially disappeared.

The following table shows the regular grain warehouses of Chicago at present, giving their names, owners and capacities:

Name of elevator.	Proprietors.	Receive from	Capacity, bu.
Central A....	Central Elevator Co.	I. C. R. R.....	1,000,000
Central B....	do	do.....	1,500,000
C. B. & Q. A....	do	C. B. & Q.....	1,250,000
" B.....	Armour, Dole & Co.	do.....	800,000
" C.....	do	do.....	1,500,000
" D.....	do	do.....	1,800,000
" Daux.....	do	do.....	1,000,000
Rock Island A....	Flint, Odell & Co.	C. R. I. & P....	1,500,000
Rock Island B....	do	do.....	1,100,000
Galena.....	do	C. & N. W.....	700,000
Air Line.....	do	do.....	700,000
C. & N. W.....	do	C. & N. W. & c'l	500,000
Fulton.....	Munger, Wheeler & Co.	C. & N. W. & c'l	400,000
St. Paul.....	do	C. M. & St. P....	900,000
City.....	do	R. R. and canal.	1,000,000
Union.....	do	do.....	800,000
Iowa.....	do	C. & N. W.....	1,500,000
National.....	do	R. R. and canal.	1,000,000
Chi. & St. L....	D. L. Seymour.	do.....	1,000,000
Wabash.....	Chicago Elevator Co.	W. St. L. & P....	1,500,000
Indiana.....	do	Various R. R....	1,500,000
Pacific A.....	Chi. & Pacific Elevator Co.	C. M. & St. P. & C	500,000
Pacific B.....	do	C. M. & St. P....	1,000,000
Pacific C.....	do	do.....	75,000
Illinois River...	Norton & Co.	Canal.....	175,000
Neely & Hambleton's....	I. T. & S. Bank.	R. R. and canal.	600,000
Chi. & Dan.....	P. D. Armour.	R. R.	350,000
D. E. Sibley B....	Sibley & Co.	C. & A.....	120,000
Alton.....	G. A. Seaverns.	do.....	900,000
Seaverns A.....	G. A. Seaverns.	do.....	500,000
Alton B.....	G. A. Seaverns.	do.....	500,000
Armour.....	Armour Elevator Co.	C. M. & St. P....	2,000,000
Santa Fe.....	Santa Fe Elevator Co.	A. T. & S. F....	1,500,000
Total.....			31,170,000

BROOM CORN.

Of late the amount of broom corn produced in this country, and especially in the Illinois Central district, has been steadily increasing; consequently the buyers have not been so active, and the demand has been rather dull. Throughout the entire year just past the trade was slow, which was caused by the supply being in excess of the demand. There was probably as much corn used during the last year as formerly for the manufacture of brooms, but the large crops of the last two years have given a surplus. Broom corn can only be used for one thing, and when that demand is supplied, the surplus is dead stock, for it cannot be used for anything else, and will have to be carried over to the following season. During the past year the values have ruled probably lower and with less reaction than during any previous year.

The Illinois Central district alone has raised enough corn the last two years to supply all manufacturing requirements. Instead of a crop of 6,000 to 8,000 tons as formerly, the farmers of that district have had about 12,000 tons the last two years. The most experienced dealers have been deceived by the rapid increase in the production, and some have lost heavily on account of misjudging the supply. In 1887 the Illinois Central district produced three times as much as was anticipated, and since then the surplus has been increasing and the market value declining, until now there is a surplus of between 5,000 and 6,000 tons, and the price is below what it has been for a long time.

During 1888 the receipts of grain at Buffalo amounted to 72,178,000 bushels, which is about 11,000,000 bushels less than the preceding year. The receipts of wheat decreased about 20,000,000 bushels, while the receipts of corn increased 6,000,000 bushels.

Agents for grain dealers, who in December traveled over the principal wheat districts of Illinois, Missouri and Kansas, for the purpose of examining the condition of the growing crop, report the grain better than for the corresponding time in any of the last years, though the growth is backward for the season. With a mild winter a good yield next season is predicted, but severe cold without snow will prove disastrous.

THE EUREKA OAT CLIPPER.

This machine, manufactured by S. Howes, Silver Creek, N. Y., has met with a very high degree of favor, and although but a short time on the market a gratifyingly large demand has been built up for it. The machine is very compactly built, in operating mechanism is extremely simple, runs very lightly and has very great capacity. In solidity of construction, perfection of fitting and finish, and high quality of materials employed it is remarkable. Its ventilation is perfect, and all impurities are immediately removed as rapidly as they become loosened from the grain. In the operations of scouring and clipping, hulling of the oats does not occur.

The scouring case is of iron, hardened, having depressed longitudinal openings, cast upon chills, thus insuring the extreme of durability. This scouring case is made in sections, any one, or more, of which may be removed without taking down the machine. The scouring cylinder has arms or beaters which are adjustable, thus placing the degree of treatment entirely under the control of the operator. These arms or beaters aid in forcing the loosened impurities through the openings in the scouring case and in the strong suction of the exhausting fan by which they are delivered away from the machine.

Four distinct separations are made. The material is first subjected to a screening or sieving operation as it is spouted, or otherwise delivered, to the machine, to remove sticks, straws, stones or other large or foul material. As it passes from the shoe or screen it enters the scouring case through a strong current of air which removes light impurities such as chaff, shrunken grains, dust, etc., etc. While in the scouring case a strong current of air is being continually forced through it carrying the impurities which are loosened by the scouring operation out through the openings in the scouring case. Finally as the scoured or finished material leaves the machine it passes out through a current of air which removes all traces of loose impurities.

Mr. Howes builds this machine in eight regular sizes, capacities ranging from twenty bushels per hour up to 500 bushels per hour. The capacities are in all cases fully guaranteed. In many instances the rated capacities have been greatly exceeded with perfectly satisfactory results to the user.

As in some measure indicative of the profits realized by the use of the Eureka Oat Clipper, we may mention that one of Mr. Howes' customers recently put through his machine 3,000 bushels of oats, the cleaned and clipped product of which was 2,926 bushels, showing an apparent loss of 74 bushels. The 3,000 bushels cost 30 cents per bushel, or \$900.00. The 2,926 bushels of scoured and clipped oats sold for 33 cents per bushel, or \$965.58, showing a gain or profit by the operation of \$65.58. In many cases, however, this profit is increased by running the scourings, clippings and screenings into the feed.

Mr. Howes, if addressed as before indicated, will give all further desired information.

AMERICAN GOODS IN AFRICA

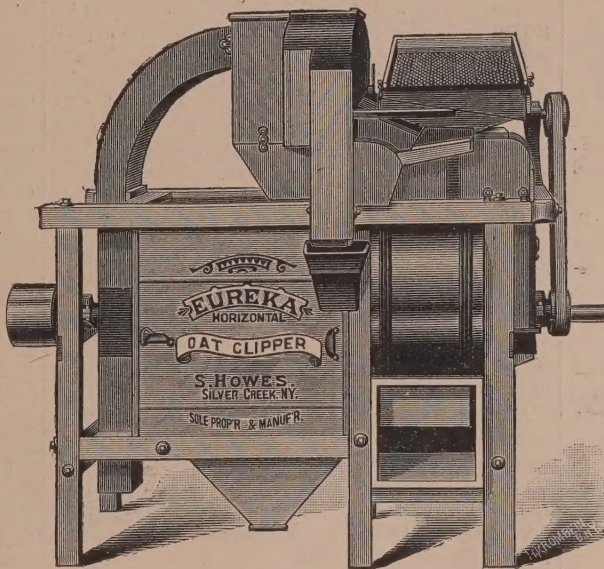
The enterprising firm of Johnson & Field, Racine, Wis., manufacturers of "The Racine" Dustless Separators, farm and warehouse fanning mills, and land rollers, have for a long time been shipping their goods to Morocco, in Africa. The success which their superior machinery has met with in that far-off market should lead to more extended operations, and doubtless would do so if our carrying trade across the ocean was in better shape to do business. We take pleasure in publishing the following letter, received by Messrs. Johnson & Field from their correspondent at Casablanca, as showing how satisfactory the American machinery proves, on coming into competition with that of English manufacture: "Mr. H., who is British Vice-Consul here, and at the head of a large firm, told me to-day that he was highly pleased with the result of your mills. He said there was no other machine in this place worth a rap alongside of the American machines. 'You see,' said he, 'the others are always getting out of order, and when they do work they clean only about half as much as these American mills.' The small farm mill I got from you through my correspondents in New York some six years ago, the first cost of which was \$20, I sold last week, after six years' use, for \$40. If your establishment was handy, like London, you would get more orders. The people here never think of

buying anything until they are in want of it. Then, when they find it takes so long to get it from you, they can't afford to wait, and send off to England or France for machines."—*The Agricultural Implement.*

LINCOLN AS A GRAIN CENTER.

That Lincoln is the center of the Nebraska grain trade will probably be denied by no one. The capital city is nearer to the best grain producing region than any of its competitors and has better facilities for handling grain. It has more buyers representing Eastern houses and more local firms owning elevators throughout the state than Omaha, its principal competitor. The business of the branch houses and the purchases of the Lincoln dealers has been estimated at 30,000,000 bushels of grain annually. The amount of grain handled is increasing rapidly and the business of Lincoln's grain merchants is steadily spreading over more territory. A year ago only one commission firm had established a permanent agency at Lincoln and but seventy-five elevators throughout the state were owned by Lincoln dealers. Now there are four branch houses, and Lincoln dealers own 115 elevators. The prospects are that several more firms will establish branch houses this year.

The first commission house to open a branch at Lincoln was Redmond, Cleary & Co., of St. Louis. W. H. Ax.



THE EUREKA OAT CLIPPER.

tater, the business manager, is assisted by a traveling man and a stenographer, and covers the entire state with the exception of a few small stations. The branch buys grain outright and also solicits consignments. During the past year the branch did a business of several million bushels.

Langenberg Bros. & Co., also of St. Louis, have been doing business from Lincoln for the past two years and last year they established a branch under the management of C. W. Cockrell. On an average 150 bids are sent out daily from their office, also daily reports and weekly circulars.

Last September the Grier Commission Company of St. Louis, after trying to do business from another point, established an office at Lincoln, under the management of Mr. D. McLennan, and now buy grain on all the railroads of the state.

Mr. H. C. Tatum, who represents the D. R. Francis & Bro. Commission Company of St. Louis, remains in the city during the grain season.

Chicago houses occasionally send their agents to Lincoln, but as yet have established no branch house. Baltimore houses are more anxious to obtain the trade, and besides having two or three buyers in Lincoln most of the time the firm of Gill & Fisher have established their Western office at Lincoln. S. L. Russell is manager of the Nebraska department, and sends annually an immense quantity of grain to the seaboard.

A number of the most enterprising elevator companies of the state have their headquarters at Lincoln and share the business of about 125 of the best grain towns of the state. Gregg Bros. have twenty elevators on the B. & M. R. R. Kendall & Smith own twenty-two elevators and do a large business. C. T. Brown & Co. own twenty-three on the U. P. and the K. C. & O. railroads, and Lowery

Bros. have twenty elevators. Morrissey Bros., who removed to Lincoln the past year, have a very extensive grain business. S. W. Little & Co., who have been at Lincoln for a number of years, have always enjoyed a large business. The Hon. Patrick Egan, the ex-president of the Land League, also has an office at Lincoln and gets a goodly share of the business. Thos. Cochrane and John B. Wright are located at the capital and do a large business, the latter being one of the heaviest dealers in flax in the West. Despite the fact that the grain business of Lincoln is immense the city's elevator capacity is small and an effort is now being made to have a large elevator erected.

HANDLING GRAIN FROM SHIPS.

In a recent paper Mr. T. W. Hibbard, an English miller, tells how they unload grain from ships in England. In the course of his paper he says: "The most economical mode of handling foreign wheat is when the store is close upon a waterway of sufficient depth to allow of large barges coming alongside. Of course if the ship could come so much the better, but as this is seldom the case, we will consider the barge traffic. Have your barge specially constructed for the work, and self-propelling; two men will easily manage it. It must be constructed with two bottoms, allowing a space of 2½ feet

between. An elevator at the prow, driven by the barge engine, will be fed by two bands arranged under suitable openings in the false bottom. These bands will bring the wheat to the elevator, which, in turn, will deliver it on a band running into the store. It must then be conducted to the top story and feed a band running the whole length of the store, and having an appliance for throwing off the wheat at any point. The store should be built in a series of compartments or silos; each silo should be in communication with a band running in the basement, so that the contents of any silo can, if required, be run out and transferred by the elevator and top band to another. The advantage of this arrangement is seen when tender wheats are stored, as such require moving occasionally to prevent deterioration by heating, etc. Wheat which comes in out of condition can, by freely using your power of moving, be soon got into condition. In connection with the main elevator an automatic weigher should be fixed to register the wheat received, and immediately following it a warehouse separator of large capacity, succeeded by another weigher which will give the net weight going to silos, and show by the difference in weights the loss in cleaning, thus drawing attention at once to wasteful wheats. The warehouse

separator will, by taking from the wheat dust light screenings, etc. (which frequently, I may say almost always, contain living organisms prejudicial to its storing well), do good service. You will notice I recommend the band conveyor. An ordinary screw conveyor should not be used, as the power consumed by it, when moving large weights of grain, is very largely in excess of that by the band. Yet another weigher and band should be provided for weighing and moving wheat from silos to cleaning house.

GRAIN STORAGE AT MILWAUKEE.

At a meeting of the Milwaukee Chamber of Commerce on Dec. 22 the amendments to the rules relating to the storage of grain on deliveries, which have been pending for the past two months, were approved. The directors thereupon adopted the following resolutions, which carry out the provisions of the amendments, and their action was immediately ratified by the Chamber:

WHEREAS, It is provided in the amendment to Rule 11 that all deliveries of grain and flaxseed sold in store shall be made on warehouse receipts representing the property in store in warehouses approved and declared regular by the board of directors, with the approval of the Chamber of Commerce; and

WHEREAS, The following described elevators have, by long-established custom, been recognized by the trade as regular and receipts for grain and flaxseed stored therein have been delivered and received in settlement of trades and contracts, viz., the Chicago, Milwaukee & Paul Co.'s elevators "A," "B," "C," "D" and "E," Angus Smith & Co.'s elevators "A," "B" and "C," and C. Manegold, Jr., & Co.'s Northwestern Marine Elevator, including annexes heretofore used in connection with said elevators; therefore,

Resolved, That the elevators herein described be and are hereby declared regular in accordance with the provisions of the amendments to Rule XI.



Issued on December 18, 1888.

ALARM FOR GRAIN ELEVATORS, ETC.—John R. Beynon, Watertown, Wis., assignor of one-half to James B. Murphy, same place. (No model.) No. 394,815. Serial No. 280,054. Filed July 16, 1888.

BAG HOLDER.—John Sidle, Shreve, Ohio, assignor of one-half to Philip S. Sidle, same place. (No model.) No. 394,942. Serial No. 274,216. Filed May 17, 1888.

BALING PRESS.—Jacob Price, San Leandro, Cal. (No model.) No. 394,632. Serial No. 278,047. Filed June 23, 1888.

BALING PRESS.—Ephraim C. Sooy, Kansas City, Mo. (No model.) No. 394,623. Serial No. 280,905. Filed July 24, 1888.

CAR MOVER.—Abraham L. Wiley, Bethel, Ind. (No model.) No. 394,628. Serial No. 284,555. Filed Sept. 4, 1888.

GRAIN ELEVATOR.—Ambrose Dieffenbach, Devil's Lake, Dak. (No model.) No. 394,560. Serial No. 275,825. Filed June 2, 1888.

AUTOMATIC GRAIN METER.—Alfred Springer, Cincinnati, Ohio, and Wm. Kent, Passaic, N. J. (No model.) No. 394,665. Serial No. 266,657. Filed March 9, 1888.

ROTARY GRAIN METER.—James H. Richford, Peoria, Ill., assignor of two-thirds to Ferd. Luthy and Charles T. Luthy, same place. (No model.) No. 394,938. Serial No. 281,008. Filed July 25, 1888.

ELEVATOR AND SEPARATOR FOR MILLS.—John R. Beynon, Watertown, Wis., assignor of one-half to James B. Murphy, same place. (No model.) No. 394,813. Serial No. 253,688. Filed Oct. 29, 1887.

Issued on December 25, 1888.

GRINDING MILL.—Albert M. Hill, New Haven, Conn. (No model.) No. 395,140. Serial No. 278,822. Filed July 2, 1888.

MALT TURNING APPARATUS.—William Griesser, Chicago, Ill. (No model.) No. 394,965. Serial No. 252,352. Filed Oct. 14, 1887.

SEPARATOR.—John B. Nichols, Milwaukee, Wis. (No model.) No. 395,168. Serial No. 283,870. Filed Aug. 27, 1888.

Issued on January 1, 1889.

BAG FILLING MACHINE.—Harry D. Hammersley, Bristol, assignor of one-third to Burnet Landreth, Bloomsdale, Pa. (No model.) No. 395,390. Serial No. 237,538. Filed May 9, 1887.

CAR STARTER.—Adolf Jeenel, Breslau, Prussia, Germany. (No model.) No. 395,656. Serial No. 356,027. Filed Nov. 23, 1887. Patented in Germany Sept. 14, 1887, No. 42,565; in Belgium Nov. 10, 1887, No. 79,846; in England Nov. 11, 1887, No. 15,396; and in Austria-Hungary March 26, 1888, No. 44,414 and No. 7,202.

CRUSHING AND GRINDING MILL.—James F. Winchell, Springfield, Ohio, assignor to the Foss Mfg. Co., same place. (No model.) No. 395,413. Serial No. 244,270. Filed July 14, 1887.

PREPARING GRAIN.—George H. Cormack, Rockford, Ill. (Reissue.) No. 10,978. Serial No. 286,614. Filed Sept. 27, 1888. Original No. 353,924, dated Dec. 7, 1886.

APPARATUS FOR MAKING MALT.—Justin Whitney, Boston, Mass. (No model.) No. 395,468. Serial No. 172,877. Filed July 28, 1885.

ROLLER REDUCTION MILL.—John H. Woolcott, Cincinnati, Ohio. (No model.) No. 395,534. Serial No. 226,071. Filed Jan. 31, 1887.

MACHINE FOR AUTOMATICALLY WEIGHING GRAIN.—Horace M. Fulwider, Redmon, Ill. (No model.) No. 395,561. Serial No. 274,876. Filed May 22, 1888.

Issued on January 8, 1889.

BALING PRESS.—Tully Runkle, Farmersville, assignor of one-half to James F. Yeager, Prairie Creek, Ind. (No model.) No. 395,718. Serial No. 275,096. Filed May 25, 1888.

CHAIN CONVEYOR.—James M. Dodge, Philadelphia, Pa., assignor to the Ewart Mfg. Co. of Illinois. (No model.) No. 395,883. Serial No. 251,565. Filed Oct. 6, 1887.

FEED REGULATOR FOR GRINDING MILLS.—James F. Winchell, Springfield, Ohio, assignor to the Foss Mfg. Co., same place. (No model.) No. 396,058. Serial No. 235,849. Filed April 23, 1887.

AUTOMATIC GRAIN MEASURE.—Harry W. Cowan, Gros, Dak. (No model.) No. 395,743. Serial No. 267,903. Filed March 20, 1888.

FEED MECHANISM FOR ROLLER MILLS.—William M. Jewell, Pine, Col., assignor to Samuel H. Templeton, Scranton, Iowa, and J. A. McNulty, Denver, Col. (Reissue.) No. 10,979. Serial No. 168,559. Filed June 13, 1885. Original No. 280,184, dated June 26, 1883.

DULUTH'S GRAIN TRADE FOR 1888.

The movement of grain in Duluth for the past year has fallen far below what was expected. The receipts of wheat like the receipts in 1887 have fallen below the receipts of the preceding year. The many mills of the Northwest have required considerable wheat to keep them running and shipped to Duluth over 400,000 barrels more flour than in 1887. But in spite of conflicting circumstances, Duluth received more than her proportion of the surplus wheat, and for the crop year received about 10,000,000 bushels less than the preceding year. The receipts of wheat were 7,847,239 bushels, and the shipments were 13,505,503 bushels. The amount in store in the elevators on Jan. 2, 1888 was 6,578,527 bushels; 9,125,791 bushels on May 14; 999,175 bushels on Sept. 3 and 744,973 bushels on Dec. 17.

During the year there were 14,240 cars of grain inspected, of which 9,727 cars were graded No. 1 hard; 1,426 cars No. 1 Northern; 951 cars No. 2 Northern; 422 cars No. 3; 382 cars were rejected; 418 cars received no grade, and 914 cars of white winter. The receipts of corn, oats and barley were 237,639 bushels, 46,964 bushels and 34,062 bushels respectively. The shipments of corn were 444,806 bushels, of oats 66,243 bushels and 34,062 bushels of barley.

Dakota has an elevator capacity of 23,043,350 bushels. The licensed elevators and warehouses have a capacity of 10,518,000 bushels, and the unlicensed have a capacity of 12,525,300 bushels.

Among the members of the Illinois Legislature, now in session at Springfield, are four grain dealers—one in the Senate and three in the House. In the Senate Augustus M. Strattan represents the Forty-third District. In the House Robert H. Davis, John Carstens and Robert S. Stinson represent the Thirty-seventh, the Fortieth and the Fiftieth District, respectively.

The Canadian Marine Association has appointed a committee to interview and urge a reduction of canal tolls to 20 cents per ton on grain passing through Welland Canal for Montreal for export. It is also a part of the committee's duty to request the co-operation of the Boards of Trade in Toronto, Hamilton, Kingston and Port Arthur. The general opinion of the association is that the continuance of the discrimination against American ports by keeping up the 20-cent rate and allowing a rebate of 18 cents to vessels whose cargoes are to reach the seaboard by Canadian routes will inevitably result in retaliation.

Oats grown in England and Scotland weigh fifty pounds to the bushel, while the same oats grown here at once dwindle to forty pounds, and if sown again will still further dwindle to thirty-five pounds per bushel; and the next season will be reduced to the condition of our normal weight of oats, which is from twenty-eight to thirty pounds per bushel. The reason of that is the low temperature of Great Britain is more conducive to the better development of oats than our tropical summers.—*Iowa State Register.*

The bill making the head of the Department of Agriculture a Cabinet officer, which passed the House with a clause providing for the transfer of the Signal Service to that department, has passed the Senate, but without the Signal Service transfer clause. In regard to the bill, Mr. Colman, Commissioner of Agriculture, said: I do not believe that the Department of Agriculture should be made a Cabinet department. It is entirely a scientific department, and should be held altogether aloof from politics. I have always been opposed to the pending bill, whether in its original or its amended shape. The department would be much better, I think, as it is. At present it is one of the best organized departments in the Government, and more independent even of the President than any of the other departments.



Henry Keller of Sauk Center, Minn., has recently patented some improvements on his fanning mill, and the new machine will be pushed on an extensive scale.

The Hart Welgher Co. has been incorporated at Peoria, Ill., for the manufacture of grain weighers and agricultural implements. The incorporators are S. B. Hart, W. C. Hanna and F. F. Proctor.

The Sioux City Engine Works of Sioux City, Iowa, write that business prospects are improving every week, and from present indications they have every reason to believe that a large season's business is before them.

The grain and flax separators made by J. L. Owens & Co., Minneapolis, have enjoyed great popularity. There are a number of firms who have in use from five to twenty of their No. 6 mills, but the firm having the greatest number employed is the Northwestern Elevator Co., who have seventy-one of their No. 6 Graders in use, all giving excellent satisfaction.

Among the certificates of incorporation filed with the secretary of state at Columbus, Ohio, Jan. 7, was that of the "W. G. Avery Manufacturing Co." of Cleveland, Ohio, with a capital stock of \$30,000, the incorporators being W. G. Avery, S. P. Churchill, Geo. W. Avery, Joseph A. Osborne and B. G. Tremaine.

In writing us of the satisfactory course of their business the past few months, Williams & Orton Mfg. Co. of Sterling, Ill., state that they are now building their "Charter" Gas Engine in sizes from two-horse power up to forty. They have been confidently expecting a demand for larger size: all along as soon as the merits of the "Charter" Engine should become known.

The J. Frey Mfg. Co. of Columbus, Ohio, have had a very prosperous year. Their sales of elevating and conveying machinery have largely increased, and the present outlook is very encouraging. This company also enjoys a large business in the manufacture of their coal mining machines and drills, for which they now have orders sufficient to keep them busy through the winter.

The Avery Stamping Company is now the style of the Avery Elevator Bucket Co. of Cleveland, Ohio. Owing to the large extension of their line of manufacture they have found it advisable to change their corporate name. In a circular they say: "We draw, press and stamp metals into shapes and depths hitherto unknown and supposed impossible by leading die makers throughout the country, and also knowing from our own experience how hard it is to get such work done, we feel confident that parties will find it to their advantage to figure with us on any difficult work of this character."

The Barnard & Leas Mfg. Co., Moline, Ill., show a summary of the last year compared with that of the year 1887, which shows the business of the latter year to have been over 50 per cent. larger than that of 1887. Prospects for the coming year are brighter than they were for 1888, and they expect to show an equal or greater increase for 1889. To keep up with orders they have been compelled the past month to put in a dynamo, and the full are system of electric lights, the intention being to run all night the greater portion of the balance of the winter. Their trade the past year has extended over a larger area than in any previous year, and each year it is called out in new fields with its goods.

The Philadelphia *Telegraph* says: We believe corn cobs should be branded as formidable toxic agents. Dr. Mulhatten reports that a negro child in Texas, six weeks of age, after swallowing nineteen large corn cobs whole, fell into convulsions and died within thirteen minutes. Assuredly, no druggist should be allowed to sell corn cobs without a physician's prescription.

Of late years there has been a rapid increase in the cultivation of square-headed wheat in France, and it has been found to yield much better than other varieties. A paper was read before the Academy of Sciences in Paris recently, showing the average yield for the season in the southern districts to be 32 bushels per acre, 40 bushels in the central, and 52 bushels in the northern districts, against an average yield of 16½ bushels for the whole of France.

THE SIOUX CITY FOUNDRY AND MACHINE WORKS, SIOUX CITY, IOWA.

We give on this page an illustration of the Sioux City Foundry and Machine Works, whose Corliss Engine was illustrated in our last issue. The business which formed the basis of the present company was established as long ago as 1871, by J. P. Dennis & Co. This firm did a general jobbing business up to 1884, when the works were incorporated with Mr. Dennis as president. At that time they commenced building the Corliss Engine, which bears their name. For a number of years the business has been increasing, and additional facilities have been demanded, until they now confidently claim the largest and best-equipped works of the kind west of the Mississippi. Mr. C. M. Giddings, who for several years was superintendent of the engineering department of Russell & Co., engine builders at Massillon, Ohio. Mr. Giddings is a mechanical engineer of well known ability, having designed and secured patents on an engine well known to the trade as the "Russell" or "Giddings". Single Valve Automatic Engine, which has made an enviable reputation as a motor for electric lighting, etc. Mr. H. J. Westover, formerly with Russell & Co. as mechanical engineer, and previously with Edw. P. Allis & Co., is mechanical superintendent of the establishment. The works are thoroughly equipped for turning out high grade engines, boilers and steam plants, and are also agents for a number of Eastern firms manufacturing small engines, pumps, etc., and are prepared at any time to furnish bids for the complete equipment of motive power plants for elevators, mills, etc., of from 1 to 500-horse power.

THE MOVEMENT OF INDIAN CORN.

The United States corn crop of 1888 is estimated at about 2,000,000 bushels, against 1,456,161,000 bushels in 1887. The proportion of the total crop exported was 6.3 per cent. in 1878, 5.7 per cent. in 1879, 5.5 per cent. in 1880, 3.7 per cent. in 1881, 2.6 per cent. in 1882, 3 per cent. in 1883, 2.9 per cent. in 1884, 3.3 per cent. in 1885, 2.5 per cent. in 1886, or an average of 4 per cent. per annum for nine years. In 1887, of the 1,456,761,000 bushels harvested, 40,307,252 bushels, or 2.8 per cent., were exported. The United Kingdom was our principal customer in 1887, taking 24,265,983 bushels; Belgium, 1,474,283 bushels; Denmark, 1,802,790 bushels; France, 1,958,750 bushels; Germany, 2,638,147 bushels; British North American Provinces, 4,109,227 bushels; West Indies, 718,581 bushels, and 90,876 barrels of corn meal; Mexico, 894,496 bushels, and all other countries 2,444,466 bushels. Roumania, South Russia, and the Argentine Republic are producers of Indian corn, and are considerable exporters as well.

The weekly average exports from Atlantic ports have been 920,000 bushels, including 655,000 bushels weekly average to the United Kingdom. The movement from Roumania during the winter months will be small, and the chances are that the exports from Odessa will be but moderate during the next four months. The Argentine Republic has a good maize crop, and the exports are expected to be larger than ever before, at least larger than last season. The United Kingdom imported from Argentine Republic in ten months in 1888 4,461,406 bushels of maize. The principal source of supply for the United Kingdom and the continent during the first quarter of

the year 1889 will be the United States, on account of the quicker transit and the low price. The interior movement of corn in the United States is quite free for the season. Receipts at primary Western points for the week ended Dec. 15 have been 3,338,415 bushels, against 3,417,382 bushels in the preceding week, and 2,930,074 bushels two weeks ago. The price is less than 1c. per pound, or 45 to 47c. for 56 pounds, delivered at Atlantic ports.—Bradstreet's.

CALIFORNIA'S LAST CROP.

Although the crop of wheat harvested last year nearly everywhere fell short of the previous year, still the Pacific coast more than held its own, and the amount exported exceeded that of 1887 by more than 50,000 tons. The rainfall for the season was considerably below the average, on account of which the crop was much less than it would have been with even an average fall. California's wheat crop is estimated at nearly 900,000 tons, leaving a surplus for export of about 600,000 tons, or 20,

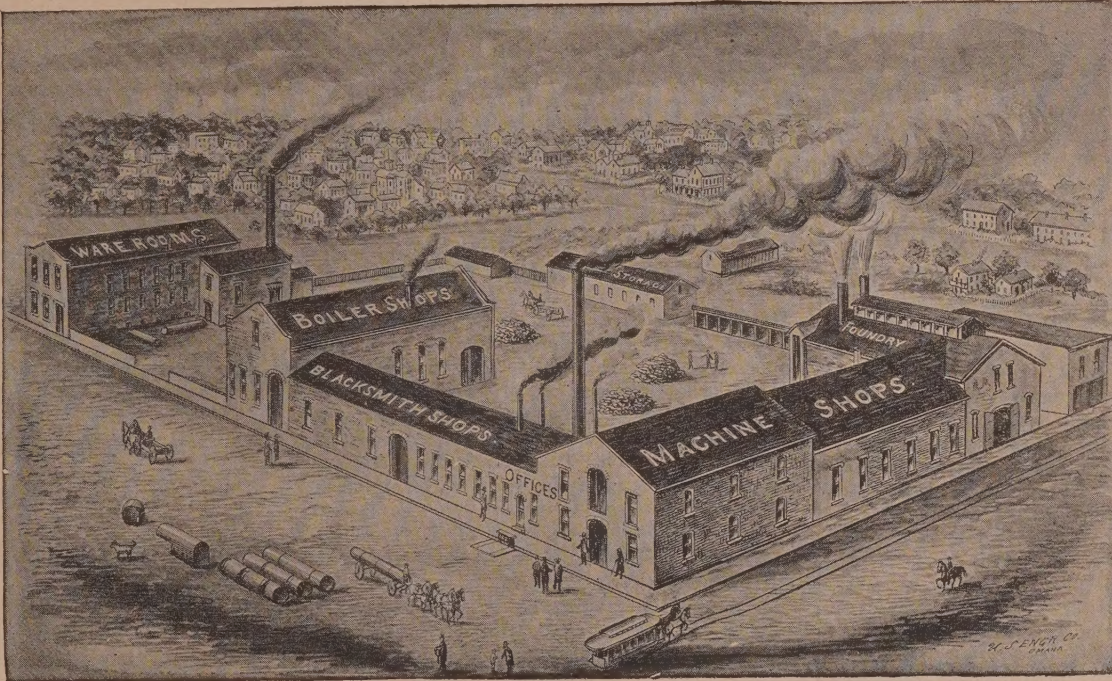
the Hawaiian Islands. It is a noteworthy fact that there were no receipts of Eastern corn in 1888, while in 1887 there were 75,000 centals received from Kansas and Nebraska, and in 1886 146,000 centals were received from Eastern points.

THE WHEAT TRADE OF MINNEAPOLIS.

That Minneapolis is the leading wheat center of this country will be denied by no one that is posted. For the last ten years the amount of wheat handled in that city has been rapidly increasing; in fact, the receipts for last year were ten times greater and the shipments fifty times greater than the receipts and shipments for 1878. Despite the short crop, which greatly reduced the trade at other points, the receipts at Minneapolis did not fall 700,000 bushels below the receipts of 1887.

For the first eight months of the year the receipts were 22,762,950 bushels, against 20,770,000 bushels for the same period of 1887, showing an increase of almost 2,000,000

bushels. But for the last four months of the year the receipts were 2,700,900 bushels less than for the same period of 1887, the receipts for that period of 1888 being 22,069,540 bushels, and 24,720,480 bushels for the same months of '87. Neither Chicago nor Duluth received anywhere near as large a proportion of the crop of 1888 as Minneapolis. The receipts of this year's crop in the latter city only fell off about 3,000,000 bushels, while Duluth's receipts decreased 10,000,000 bushels. It has been claimed that the Minneapolis millers were about the heaviest buyers in the country of the crop of 1888. Admitting this, the Pioneer Press says: "It is estimated by a



THE SIOUX CITY FOUNDRY AND MACHINE WORKS, SIOUX CITY, IOWA.

000,000 bushels. There is no official data at hand of the wheat yield in Oregon and Washington Territory.

The following table shows the surplus of California wheat for the last nine years, the amounts being given in tons of 2,000 pounds:

Year.	Tons.	Year.	Tons.
1880.....	1,380,000	1885.....	463,709
1881.....	755,680	1886.....	776,638
1882.....	776,788	1887.....	546,315
1883.....	711,275	1888.....	600,000
1884.....	1,193,808		

The above table only gives the surplus, the home consumption being about 300,000 to 350,000 tons. In addition to the amount of wheat exported last year, about 3,700,000 bushels were ground into flour and exported. During the first six months 85 cargoes of wheat and flour were shipped from San Francisco, and during the last six months of the year 156 cargoes were shipped, making a total of 241 for the year.

California's barley crop of 1888 was not as heavy as usual, and in fact fell about 2,000,000 bushels below the crop of 1887. Total exports for the year were 1,678,781 centals, of which 1,080,758 centals were exported during the last six months of the year.

The crop of corn is thought to be the largest ever harvested in the state, the stocks reported on Dec. 1 being 13,350 tons. On Jan. 1, 1879, 11,700 tons were reported. This is the largest amount ever reported previous to the crop of 1888. The receipts at San Francisco for the year were only 209,000 centals, showing a falling off of 78,300 centals from the receipts of 1887. The amount exported falls about 11,000 centals below the amount exported from the state in 1887, but is more than double the amount exported in 1885 and 1886. For the first six months 27,927 centals were exported, and during the last 26,100 centals, the most of it going to Central America, Australia and

leading authority that four-fifths of the wheat in the country elevators of the Northwest is owned by Minneapolis millers. So it can not be said that the wheat that has been received at Minneapolis was for the millers, and does not indicate that that city is the greatest wheat market."

The following table shows the receipts and shipments for the last ten years:

Year.	Receipts— Bushels.	Shipments— Bushels.
1888.....	44,832,490	10,430,500
1887.....	45,504,480	12,347,440
1886.....	34,004,200	6,651,780
1885.....	32,900,560	4,944,240
1884.....	29,322,720	4,586,960
1883.....	22,124,711	2,125,719
1882.....	18,947,500	2,105,000
1881.....	16,316,950	514,250
1880.....	10,258,700	153,600
1879.....	7,528,864	117,400
1878.....	4,581,040	209,600

CRIBBING CORN.

E. H. Rood of Bloomington, Ill., addresses the following lines of advice to "those who contemplate cribbing corn": Leave one end of your cribs empty, so that about the last half of March you can have the corn shoveled over, and within three weeks of that time the corn will be thoroughly dry and merchantable, and will grade in any market. This expense will not exceed one-fourth of a cent per bushel. Without such rehandling, corn in twelve-foot cribs will not be dry enough for May delivery. I speak from twenty years' experience.

Inspector Bonfield of the Chicago police, declares that there is no gambling carried on in that city. Has "Old Hutch" gone out of the wheat pit?—Omaha Bee.



[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

LOOKING FOR AN ELEVATOR.

Editor American Elevator and Grain Trade:—I inclose one dollar for the AMERICAN ELEVATOR AND GRAIN TRADE, commencing with December. I am closing out my warehouse business here, and am looking for an elevator at some other point. Possibly I may find advertised in your columns one that may suit me. I liked the sample copy of your paper very much.

Respectfully yours,
Elida, Ohio. M. H. LONG.

OAT CLIPPING AND OAT CLIPPERS.

Editor American Elevator and Grain Trade:—In the last issue of your paper there appeared an article on the subject of oat clipping, one clause of which can only be construed to intimate that we, in our advertisement (on inside front cover of this paper), are endeavoring to deceive the public when we claim to be the manufacturers of the "only oat clipper, separator and grader in the world." As we know you publish the AMERICAN ELEVATOR AND GRAIN TRADE with a view to the best interests of the grain trade and the public generally, you naturally seek to protect the good people from being duped and deceived, so far as you are able. This being true, we know you will permit us an explanation.

First, then, we know of no manufacturer, other than ourselves, who claims to make a dustless separator and grader; that is to say, a grain separator which will, by suction, draw out all of the light and shrunken grain, discharging the sound or No. 1 grain at one point, absolutely clean, and conveying the light grain into a separating chamber, and there making two distinct grades of the same, discharging the No. 2 grain at one point, and the light, worthless grain, chaff, etc., at another point, the dust, chaff, etc., being carried off by the exhaust fan. This, however, is what our "Excelsior" Separator and Grader does, and we know of no other such machine in existence, for if there were, the barley and wheat men would certainly be after it.

Now then, combine with this machine our "Excelsior" Oat Clipper, and you will see that our claim above mentioned is a proper one, and not a deception.

Second, we will go farther still, and claim the "Excelsior" Oat Clipper to be the only machine in the United States that will clip oats perfectly and turn them out clean, and we will put up a forfeit, against a similar amount that any manufacturer in America may wish to put up as a backer for his machine, and will place an "Excelsior" Oat Clipper alongside of any smutter, polisher, or any other machine which he or they may claim will clip oats, that he or they can produce (except one of our own), and will warrant that our machine shall clip at least one third more oats, and 25 per cent. better, than the other, or else lose the forfeit; on the other hand, take the forfeit.

This is directly to the point. In fact one test has already been made. Messrs. J. S. Stevens & Co., prominent Board of Trade men of Chicago, were imported by an agent of one of the class of machines we have referred to ("smutters"), to put one of his "oat clippers" (?) in their warehouse at Grand Crossing, the agent claiming (like the article referred to in your November issue), that his machine would do better clipping, and more of it, than any other in the market. Mr. Stevens, having heard of the "Excelsior" as being a perfect oat clipper, hesitated, but finally concluded to put in one each of the two machines, side by side, and keep the one that did the best work. One day's trial was sufficient, but to give the smutter and polisher man every possible opportunity to make his machine do its best, Messrs. Stevens & Co. kept the smutter for over two weeks, feeding it out of the same bin as the "Excelsior," and besides allowed the manufacturer to send an expert to operate his machine. After due time the expert acknowledged that he had done all he could, the machine was "doing its best," and that

was: capacity about 250 bushels per hour of polished oats, with the ends of a few of the very brittle oats broken off, but no clipping, and more than all the machine was so crowded that the suction could not be made to take care of the fluff and chaff, as the grain passed from the machine. Whereas the "Excelsior" clipped, most emphatically clipped, and turned out perfectly clean, over 400 bushels per hour out of the same bin. Result, the "smutter" was thrown out, pronounced a "failure," and Messrs. Stevens & Co. immediately put in another (a second) No. 8 "Excelsior." We regret feeling called upon to have anything to say about anybody's goods but our own, but for the reasons stated in the first part of this communication, we think we are justified in doing so to protect ourselves. We claim a great deal for these "Excelsior" machines, but the machines themselves bear us out every time; otherwise we have sense enough to know our claims would bring us into ridicule. The argument that smutters are cheaper, simply because the price is \$75 or \$100 less than the "Excelsior" can be sold for, does not hold good, for the very simple reason that smutters, if run at high speed, will break and destroy a great deal of grain; besides, the difference between 250 bushels per hour of partially clipped oats, and 400 bushels per hour of perfectly clipped oats, means lots of money in the course of a year, or even thirty days. The "Excelsior" will do the same class of work that a "smutter" does at the rate of 700 bushels per hour, which means a difference of 4,500 bushels per day of ten hours, comparing the larger sizes of machines.

Very respectfully,
Racine, Wis. E. H. PEASE MFG. CO.

DETROIT'S GRAIN TRADE.

The grain business of Detroit for 1888, as a whole, was lighter than the preceding year, and the business of 1887 was in turn lighter than in 1886. The wheat trade has been less the last two years, owing to light crops, but still Detroit has no occasion to complain, for she has had more than her proportion of the business, and the falling off the last year was very small. The receipts of oats exceeded the receipts of the two preceding years, and the shipments of oats and barley showed a gain over 1887. For the first time there was considerable quantities of rye handled. The following table shows the receipts and shipments for the last three years:

Product.	RECEIPTS.		
	1888.	1887.	1886.
Wheat, bu.....	7,098,873	7,482,574	9,008,171
Corn, bu.....	1,116,246	1,548,657	2,677,076
Oats, bu.....	2,060,840	1,424,287	1,733,646
Barley, bu.....	745,078	1,248,778	.....
Rye, bu.....	85,111	.....	.....

Product.	SHIPMENTS.		
	1888.	1887.	1886.
Wheat, bu.....	6,586,339	7,919,062	8,126,550
Corn, bu.....	1,032,729	1,635,301	2,223,834
Oats, bu.....	999,430	489,445	1,121,298
Barley, bu.....	55,652	39,200	28,099
Rye, bu.....	68,951	.....	.....

The amount of wheat in store in the Detroit elevators at the close of 1888 was 974,000 bushels, against 1,000,000 bushels for the last day of 1887, and 2,300,000 bushels for the same day of 1886.

REPORT OF THE ILLINOIS RAILROAD AND WAREHOUSE BOARD.

The eighteenth annual report of the Illinois Railroad and Warehouse Board has been made public, but does not contain many things of interest to the grain trade. During the year there were 198,578 carloads of grain inspected in this city, of which 60,760 carloads were produced in Illinois. The report suggests that the expense of the grain inspection system does not fall entirely upon Illinois producers, but on the contrary they only pay one-third of it. However, the benefit of the inspection is much greater to the producers than the cost.

It is to be regretted that the Board did not give the weight of their official counsel to the advice that corn be not sent to this market until it has had plenty of time to cure. As wheat cannot be harvested by a header, except on the Pacific slope where it is very dry, without preventing it from curing properly to stand storage for any considerable length of time, so that corn that is shelled in the fall cannot be expected to stand long storage. As the one needs the straw to help it harden, so the other needs the cob to gradually absorb the moisture. Corn should stay on the cob, as a rule, until spring, and then it can

grade as No. 2 and stand any amount of warehousing, but if it is rushed off to market in the fall or winter, it is generally fit only for No. 3 grading, a grading which serves notice on the purchaser that it will not stand hot weather storage. There is really nothing gained and much lost by premature marketing.

THE AGRICULTURAL DEPARTMENT'S REPORT.

The December report of the Department of Agriculture, which publishes in detail estimates of some of the more important crops, makes the product of corn 1,987,790,000 bushels grown on 75,672,763 acres, valued on the farm at \$667,561,580, or 34.1 cents per bushel, against 44.4 cents for the crop of 1887, a decrease of 25 per cent., the product of 1887 being 27 per cent. less in volume than that of 1888. The average yield of the commercial belt, or seven corn surplus states, averages 33.2 bushels per acre. The Atlantic coast, south of the Potomac, averages 11.2 bushels of comparatively poor quality. The wheat aggregate is 414,838,000 bushels, grown on 37,336,138 acres, valued at \$384,248,030. The average yield is therefore 11.1 bushels per acre; winter wheat, 11.6; and spring wheat, 10.3 bushels per acre. The average farm value is 92.6 per bushel, against 68.1 cents for the previous crop, a difference due more to foreign than domestic scarcity.

The aggregate for oats is 707,737,000 bushels, grown on 26,998,282 acres, and valued at \$195,424,240. This is 27.8 cents per bushel, against 30 cents for the crop of 1887.

A comparison of aggregate values shows that the present corn crop is worth only \$31,000,000 more than the previous one, wheat \$74,000,000 more, oats \$5,000,000 less.

KANSAS CITY'S GRAIN TRADE FOR 1888.

Although the grain business of Kansas City has not yet assumed the vast dimensions of the grain centers of the Northwest, still the report for 1888 shows an increase over the amount of business done in 1887, and the indications are that Kansas City will some day have a large share of the grain trade of the Southwest.

The crop of wheat in Kansas for 1888 was more than twice as large as in 1887. The receipts of wheat at Kansas City for August, September and October were 345,431 bushels, 106,046 bushels, and 88,073 bushels more than for the respective months of 1887. But the receipts for the last two months of the year showed a falling off. The total receipts for the year were 1,759,808 bushels, against 1,732,368 bushels for the preceding year. There was an increase of over 300,000 bushels in the shipments for August, and nearly 200,000 bushels for September, over the shipments of the same months of 1887. For the last three months of the year there was a decrease in shipments. The total shipments for the year were 1,149,750 bushels, against 1,021,140 bushels for 1887.

For the first ten months of 1888 the receipts of corn were much less than for the same period of 1887; this was due to the short crop of 1887. But the receipts for November and December were 1,440,852 bushels more than for the same months of 1887. The total receipts for 1888 were 4,098,105 bushels, against 3,989,919 bushels for 1887. The shipments, too, showed a great decrease until the last two months, when there was a wonderful increase, the total for the year being 1,908,030 bushels, against 2,238,421 bushels for 1887.

The receipts of oats showed an increase for every month of the year, the total being 3,205,510 bushels, against 2,357,717 bushels for 1887. The shipments for the year were 1,104,320 bushels, against 897,558 bushels for 1887.

The receipts of rye were 57,200 bushels, against 39,800 bushels for 1887, and the shipments were 20,800 bushels, against 19,535 bushels for 1887. Of barley the receipts were 310,106 bushels, against 257,400 bushels for 1887. The shipments were 295,300 bushels, against 99,400 bushels for the preceding year.

The price of corn has a wide range in the various parts of the United States. These averages are: Ohio, 35; Indiana, 31; Illinois, 29; Iowa, 24; Missouri, 32; Kansas, 26; Nebraska, 22. The range in the Eastern states is from 65 to 75; in New York, 57; Pennsylvania, 51; and in the South from 41 in Texas to 64 in South Carolina.

Fires, Casualties, Etc.

The death is announced of John M. Platt, a member of the Chicago Board of Trade.

H. W. Hippen of the firm of Smith, Hippen & Co., grain dealers at Pekin, Ill., is dead.

Burglars blew open the safe of James Wilson, a grain dealer at Logansport, Ind., Jan. 2, but secured nothing.

The Farmers' Alliance Elevator at Elgin, Minn., was destroyed by fire Jan. 12. Loss \$5,000; insurance \$1,500.

Henry S. Potter, secretary and manager of the Union Depot elevator at St. Louis, Mo., is reported as seriously ill.

Consider Tinkler, a grain dealer of Wea, Kan., died recently from the effects of bathing in extremely cold water.

Burglars entered the residence of N. W. Holland, a grain merchant at Patoka, Ill., recently, and stole two watches and \$175 in money.

Jerome A. Babbitt, a laborer, fell through a grain elevator hatchway at Louisville, Ky., Dec. 18, and broke his neck. Death was instantaneous.

Thomas Ewers' large new grain elevator at Milliken, Mich., was burned Dec. 29, with a large quantity of wheat and oats. Loss, \$10,000; insurance, \$1,700.

Charles Compton, a grain dealer at Fancher, Ill., was adjudged insane Jan. 1, and taken to the asylum at Anna. Political and religious excitement combined with business troubles was the cause.

The grain elevator at Waverly, Iowa, on the Chicago, St. Paul & Kansas City Railway, burned Jan. 11, involving a loss of \$3,000. The fire was supposed to be the work of an incendiary.

During a wind storm the iron roof of Gooderham & Wort's new elevator at Reading, Ont., was torn off, ripped and rolled up in an extraordinary manner. The damage done amounted to several hundred dollars.

The Northwestern Elevator Company's elevator at Willmar, Minn., was gutted by fire Jan. 9. The damage, aside from possible smoked wheat, was about \$2,500. It was thought that the fire was set by a passing locomotive or switch engine.

Edward Thorn, the engineer at Nelson's elevator at Mason City, Ill., had a finger crushed Dec. 21, so that amputation was necessary. He was oiling the engine when a friend hailed him, and in turning around was caught. He has an accident insurance policy for \$15 per week during his disability.

The large grain house of Messrs. Bruce, at Beaverton, Ont., was destroyed by fire Dec. 15, with about 4,000 bushels of grain. Loss on building is estimated at \$2,000, partially covered by insurance. There was also a light insurance on the grain. Fire has never been used in the building, and it is thought that the fire was of incendiary origin.

Benjamin E. Hopkins, late assistant cashier of the defunct Fidelity National Bank of Cincinnati, died at his residence in that city Jan. 7. The President pardoned him Dec. 20, but the paper did not reach the penitentiary until Jan. 4. He reached his home that night, but never fully rallied from the excitement of the meeting with his family.

Frank Baker, an employee of the Union Elevator at Council Bluffs, Iowa, was run over by the cars Dec. 23 and killed. It is thought that he was crossing the tracks, and while climbing between the cars, they started and threw him under the wheels. When found he was still breathing, but soon died. He was thirty-one years of age and single.

W. J. Armstrong, the owner of the elevator at Palmer, Neb., was fatally injured Jan. 5. While attending to some machinery late in the evening, he passed the fly-wheel of the engine and was caught and carried three times around the great wheel. When found he was in the pit under the wheel and partly conscious. He was paralyzed in the lower portion of his body and limbs. He lingered in great agony until midnight and expired.

The Nicaragua Canal would shorten the distance between New York and San Francisco, by water, nearly 10,000 miles.

Mr. and Mrs. James Barrell of this city, recently celebrated their silver wedding. Mr. Barrell is a member of the firm of Dole & Co., owners of the Chicago, Burlington & Quincy Elevator, and an old resident of Chicago, having been in active commercial life here the past forty years.

B. C. Beach & Co. of Champaign, Ill., have completed the erection of a new elevator at Leverett, Ill. It has a storage capacity of 12,000 bushels, and an elevating capacity of 5,000 bushels per day. It began operations Jan. 4, under the management of James Beach and Mr. Bridges.

OLDTIME CORN EUSKINGS.

"Sarge" in the Atlanta Constitution: "Did you ever haul up corn with a yoke of oxen?" asked Plunkett, as he lit his pipe and took his seat in the corner.

"Gathering corn with oxen haint no easy job," continued the old man, as he settled back in his rocker. "You have to jerk and haw and gee to keep 'em from pulling their necks off stretching out for eating on each side, and the man that can drive 'em under such circumstances and not cuss is a deservin' man for sure. I've been driving for the boys to-day, and my old bones ache and my throat is sore from jerking and whooping, and then, besides, corn gathering time is not what it use to be, and it don't bring the frolic and fun of the shucking like it used to, but I don't say a word, for I know if I did some of these youngsters would say 'the old man's liver haint flopped,' so I just grin and bear it, and comfort myself by thinking of the days when I was young and of the good times we had then."

"Corn-gathering then was a frolic, for we knowed that a good time was coming. The corn wasn't throwed in the cribs in them days, but a big pile was made in the lot and then the night was set for a shucking, and the settlement gathered in—black and white—and the corn was shucked, put in the crib, and the shucks penned, all in one night. I've seed a pile of 3,000 bushels shucked and put up in one night, and there wasn't a tierd person in the crowd, for there was fun and frolic and songs and dances, and there was 'looking for the last ear' before anybody knowed it."

"Them old shuckings are things of the past, but the generation to come will never feast on melodies sweeter than the nigger songs of the old corn shucking days. I've sat at night and listened to the crowds as they were on their way to the corn-pile. They always went in crowds and had their leaders, and the young masters would go along to protect them, and they felt as free and as grand as they have ever felt since the war, and there has never been a gang of since the war niggers that were near so happy as those crowds, as they went across the fields singing:

Old massa give me holloday,
He says he'll give me more;
I thanked him very kindly,
As I shoved my boat from shore.
O, my dearest May!
You're lovely as the day,
Your eyes so bright
They shine at night,
When the moon has gone away.

And then over on the river you'd hear the big chain lumber on the bottom of the ferry-boat, and as the ferryman pulled out from shore you'd hear fifty voices of another crowd join in chorus and sing:

Then row away, row,
O'er the waters so blue,
Like a feather we'll float,
In our gum-tree canoe.

"But the climax was at the corn pile. With two or three hundred niggers at the foot of a corn pile as big as a house, a 'leader' would mount on top and start off with 'I will start the holler,' and the rest would come in with 'Buglelo.' It ran thus:

'I will start the holler!'
'Buglelo!'
'I will start the holler!'
'Buglelo!'
'O, don't you hear me holler!'
'Buglelo!'
'Massa's got a bugle!'
'Buglelo!'
'A ten-cent bugle!'
'Buglelo!'

"And on and on the leader would 'call' and the crowd would answer till they would want a change, which was indicated by throwing corn at the 'caller,' and it never failed to bring him down, and then another leader would mount the pile and he'd have something on the same stile but never the same tune. And thus the night would wear along and the pile of unshucked corn diminish. The lively time would be when the pile began to grow small, and they'd begin to yell:

'Looking for the last ear!'
'Bangamalango!'
'Looking for the last ear!'
'Bangamalango!'
'Round up the corn, boys!'
'Bangamalango!'
'Round up the corn pile!'
'Bangamalango!'

"Then there was scrambling, for the work was over and the frolic begun. The crowd would gather around the owner of the corn and he was lifted on the shoulders of strong niggers and all would follow behind singing their own way as the march was continued to and around the 'big house' and then to where a bountiful feast was waiting on tables prepared in the yard.

"The tables were full, and the niggers would eat awhile and sing awhile and return to eat again. Here would be a crowd patting and dancing; other crowds would wrestle and box, while others would gather on seats in the background and sing the songs they loved to sing. I loved them old songs, and I loved them old-time niggers, for I never saw a singing nigger that was mean."

"The seasons are the same. The cotton patches grow white as they used to; but the old time nigger, as he runs across a belated watermelon in the grass around some stump and grabs it and breaks it open on his knee and scoops out the meat with his hand and thrusts it into a mouth that is always ready to smile, is not here. Corn gathering time gives no hope of a good time to come, and it's work—sure enough work—and business, business, all the time."

"THE CORNFIELD HAUNTS ME STILL."

[By the Poet-Laureate of the Nebraska State Journal.]

I have roamed in fields of wheat,
I have seen the spinach trees,
I have plucked the luscious beet,
As it swayed in summer breeze;
Where the wild dried apple grows,
I have eaten oft my fill,
Fair and gorgeous are all those,
But the cornfield haunts me still.

Where the turnip's soothed and nursed
By the soft and scented wind,
I have picked the wiener wurst,
Stripping off the yellow rind;
I have seen the carrot tall,
Cast its shade upon the hill;
Weak to me these beauties all,
For the cornfield haunts me still.

Let us go where corn vines rise
From the rich Nebraska sod,
Where the grains, like golden eyes,
Peep from out the velvet pod;
Where a peck of corn is found
By the farmer; in each hill,
Let me roam in peace around,
For the cornfield haunts me still.

Says the Chicago Herald: "If the Board of Trade statistics were worth anything the stock of corn here would have decreased over 1,000,000 bushels this week, for the Board of Trade figures made the shipments more than 1,000,000 above the receipts. In fact, however, the local stock of corn increased 113,000 bushels."

On Jan. 12 five steamships sailed from Baltimore with an aggregate of 332,000 bushels. There are several other vessels in port loading, and others are expected here soon to take on cargoes for foreign ports. The greater portion of the grain goes to Ireland, although French ports and Antwerp have received some consignments.

Says the New York Produce Exchange Reporter: "Only a small percentage of the corn arriving is dry enough to grade No. 2, the bulk of it going into the steamer grade. Hence the supply of the former is decreasing while the general stock is steadily increasing. This, of course, serves to create some uneasiness among the shorts on nearby options, especially as little No. 2 was delivered on January contracts thus far."

The regulation weight of barley is forty-eight pounds per bushel. If much below this weight it is unsalable for malting, and of late years a great deal falls below the standard. This light barley boiled makes excellent feed for horses. It puts a fine coat on them, though not so good for horses at hard work as oats. English farmers often use barley for fattening pork. It makes sweet meat; with a larger proportion of lean than that which is corn fed.

According to the report of the railroad commissioners, the crop of Dakota for 1888 was 23,000,000 bushels less than in 1887, and the farmers received nearly \$3,000,000 more for it. The crop of wheat is estimated at 40,500,000 bushels; of oats, 30,480,574 bushels; of corn, 22,068,680 bushels; of barley, 4,000,000 bushels; of rye, 3,000,000 bushels; of buckwheat, 55,000 bushels, and of flax, 3,300,000 bushels.

Says the Pioneer Press: "That elevator that the Pillsbury's are building down in the milling district reminds me of a small boy's block house. Elevator architecture is apt to be striking, but this is the cake-taker. The structure climbs up on itself and looks off into space from its lofty summit with an I-don't-care-a-continental-how-I-look expression. The only rival that this edifice is likely to have is Brother Dubois' synagogue on North Fourth street."

The Sioux Indians of Standing Rock are slowly but surely becoming good farmers. The past year they have been very successful considering the difficulties they have to contend with. They have had about 5,000 acres under cultivation, and raised 8,000 bushels of wheat, 10,000 bushels of oats, 20,000 bushels of corn, 20,000 bushels of potatoes, 1,000 bushels of onions, 20,000 bushels of turnips and rutabagas, 1,000 bushels of beans, and a large quantity of carrots, beets, melons, squash and cabbage. They cut and secured 7,500 tons of hay for their stock. These Indians own 3,874 head of cattle, 2,240 ponies and 54 American horses. The agent is confident that they will ultimately make good farmers, and become owners of land in severalty.

The Lake Superior Elevator Co., Duluth, Minn., applied for an injunction against the Standard Oil Company Nov. 14, to restrain them from storing illuminating oils and other petroleum products in quantities to exceed twenty barrels on their docks. The elevators of the company are close to the docks of the oil company and the former allege in their petition that the oil company is keeping a vast amount of oil stored on their dock and is now building an immense wooden warehouse there and that this is a menace to their property and insures it almost certain destruction at some time, as the elevators are built on piling, about which water freely circulates, and even if the elevators should be saved from destruction in event of fire in the oil warehouses and dock, the dense clouds of smoke that would envelop them and sift in every crevice would ruin the grain for all milling purposes. Judge Stearns issued an order in the case for the oil company to show cause why an injunction should not be granted.

ELEVATOR AND GRAIN NEWS

A 20,000-bushel elevator is being built at Petersburg, Va.

The three elevators at Elkhorn, Neb., are running full time.

Kingston, Ont., Canada, wants a grain elevator very badly.

An elevator is to be built at Petersburg, Va., to cost \$20,000.

Peter McGeech of Milwaukee, Wis., is again dabbling in wheat.

W. H. Beckwith has sold out his grain business at Saybrook, Ill.

T. G. Quick, grain dealer, Columbus, Ind., has made an assignment.

Ranney & Co., grain commission merchants of this city, have suspended.

Green & Crawford, grain dealers, Webster, Ia., have dissolved partnership.

The total yield of winter wheat in Missouri last year was 19,025,528 bushels.

Salz & Co., grain dealers, etc., at Centreville, Cal., have made an assignment.

E. G. Styron & Co., grain dealers, Fayetteville, N. C., have made an assignment.

The Scoville elevator at Valparaiso, Neb., was opened Dec. 10, by D. M. Deane.

W. M. Leathers of Mapleton, Iowa, will probably build an elevator and paper mill.

Work will be commenced on the new elevator at Port Arthur, Manitoba, March 1.

A new brewery is one of the things that will bloom in the spring at Rapid City, Dak.

Pratt & Worthington, grain, lumber and coal dealers, Homer, Mich., have dissolved.

Five grain elevators have been built at West Superior, Wis., within the past three years.

The Hobelman-Gottlieb Brewing Company will erect an extensive brewery in Maryland.

M. J. Sanborn, grain and lumber dealer, Menlo, Ia., has sold out to Sayre & McCollough.

The Posey & Chesebro Milling & Elevator Co. succeed Posey & Chesebro, Whitewater, Wis.

The Baltimore & Ohio Railroad Co. will erect a \$1,000,000 grain elevator at Philadelphia, Pa.

F. J. Simmons & Co. succeed F. J. Simmons in the grain commission business at Detroit, Mich.

William Burmester & Co., hay and grain dealers, Charleston, S. C., have dissolved partnership.

Brand & Hardin, Saginaw, Mich., bought upwards of 70,000 bushels of wheat from farmers last year.

The Geo. A. Bohrer Brewing Co. has been incorporated at La Fayette, Ind., with a capital stock of \$100,000.

The Louisville, New Orleans & Texas Railroad will build a 200,000-bushel elevator at New Orleans, La.

W. Armington, Delavan, Ill., has purchased the Miller Grain Elevator at Eureka, Ill., and will take charge soon.

The new elevator built for the Canadian Pacific Railroad at Fort William, Ont., is 300x75 feet and 136 feet high.

Foley & Haas will build an elevator at Danville, Ky., with a capacity of about 75,000 bushels; also a warehouse.

About 3,500,000 bushels of corn will be delivered on contracts with shippers at Baltimore, Md., within three months.

The Louisville, New Orleans & Texas Railroad will erect an elevator of 200,000 bushels' capacity at New Orleans, La.

The shipments of wheat from Tacoma, Wash. Ter., for 1888 amounted to 2,528,400 bushels as against 75,000 bushels in 1887.

Pratt & Co., grain commission merchants of Decatur, Ill., have opened a branch office at Buffalo, N. Y., with Riley Pratt in charge.

J. G. Mattingly & Son, Louisville, Ky., have started their new distillery. They expect to increase their capacity from time to time.

The Farmers' Protective Elevator Association of Platte county, Neb., recently filed articles of incorporation. The capital stock is \$2,000. The association will build an elevator and buy and sell grain. The incorporators are

William Hollingshead, J. E. Dock, H. S. Smith, John Gleason, Martin Voorhees, F. H. Gerrard and W. W. Hunington.

The Central Elevator Co., Chattanooga, Tenn., contemplate increasing the capacity of their elevator from 200,000 to 300,000 bushels.

A Ulysses, Neb., man has built the "largest corn crib on earth." It is 400 feet long, 12 feet wide and 12 feet high, and holds 25,000 bushels.

Hillsboro, Dak., has five elevators with a capacity of 200,000 bushels. Nearly 1,500,000 bushels of wheat was marketed at that place last year.

There is every indication that another large elevator will soon be erected at Omaha, Neb., to accommodate the growing demand for storage room.

John Bower of Friend, Neb., states that reports from the elevators there show that 800 carloads of corn have been shipped from Friend this fall.

Murry, Nelson & Co. of this city, have been licensed to incorporate, with a capital stock of \$50,000, and will conduct a grain commission business.

English, Morse & Co., Kansas City, Mo., have furnished a 60-horse power engine, with outfit, to the Lamar Electric Light Company, Lamar, Mo.

The Port Gibson cotton seed oil mills at Port Gibson, Miss., are running night and day, and the manager intends shortly to increase their capacity.

William Lea & Sons Co.'s elevator at New Castle, Del., is about finished. They expect to commence shipping corn to Eastern markets in a short time.

The Norton Electric Light Company, Norton, Kan., have ordered a 30-horse power engine and boiler outfit of English, Morse & Co., Kansas City, Mo.

English, Morse & Co., Kansas City, Mo., have recently furnished a pair of Ide engines, 140-horse power, to the Midland Hotel Company, of the same place.

Mr. Ocean Wilson of Wapella, Ill., who is associated with his father in the grain business at that place, was married January 11 to Miss Corinella Mason.

The Holton Electric Light Company, Holton, Kan., have purchased a 60-horse power engine and boiler, with outfit of English, Morse & Co., Kansas City, Mo.

The Omaha Milling and Elevator Co. employ thirty-five men, and their monthly pay roll is about \$1,500. The increase of business of 1888 over 1887 is 25 per cent.

The Ohio Elevator and Improvement Company, Findlay, Ohio, has been incorporated with a capital stock of \$200,000. W. H. Kinder and others are incorporators.

Copper & Enlones began buying grain at Natrona, Ill., Dec. 24, for D. H. Currey of Mason City, Ill. In the spring Mr. Currey will erect a new elevator at Natrona.

Herman H. Grau will build a large brewery at San Francisco, Cal. It will be 200x100x125 feet, built of brick and contain a full line of modern improved machinery.

The Vacuum Grain Drying Company of Chicago, has been incorporated with a capital stock of \$6,000. The incorporators are Frank Lohman, William Gresser and Henry Appel.

The grain brokerage firm of Fernald & Canby, New York City, has dissolved and each will continue to transact a brokerage business for themselves as G. H. Fernald and C. H. Canby.

Lallan & Drake, who owned two elevators doing a large business at Kappa, Ill., for a number of years, have dissolved partnership. Mr. John B. Drake will hereafter conduct the business.

The Harland & Head Elevator Co. has been incorporated at Chicago, Ill., with a capital stock of \$16,000. Incorporators, Leonard H. Harland, Alexander Austin and Edmond T. Mead.

The Lee Grain Co. has been incorporated at Lee, De Kalb county, Ill., with a capital stock of \$5,000. The incorporators are Ole O. Kettleleson, Christ Christopher, K. O. Ostervip and others.

English, Morse & Co., Kansas City, Mo., have furnished a 75-horse power Ide Automatic Engine and Boiler, with complete outfit, to the Gainesville Light and Fuel Company, Gainesville, Tex.

The farmers' elevator at Alpena, Jerauld Co., Dak., owned by the Alpena Warehouse and Elevator Company, have paid out about \$20,000 for grain the past season. They also conduct a coal business.

At a meeting of the Quebec harbor commissioners, held Dec. 4, it was resolved to interview the Minister of Public Works at Ottawa, about the construction of grain elevators at the mouth of the St. Charles.

Alex. Graves, who was in the employ of John Ferguson, a grain dealer at Lockport, Ind., has been arrested for stealing \$300 from his employer. Graves had a key that would open the inner door of Ferguson's safe and helped himself to the cash.

Omaha, Neb., is attaining prominence as a grain market. The local mills used over 500,000 bushels of corn and wheat during the past year. The elevators and mills handled 10,000,000 bushels of corn, 2,000,000 bushels of wheat, 3,000,000 bushels of oats, 6,000,000 bushels of

barley and 250,000 bushels of flax. Himebaugh & Merriam, grain dealers, show a total number of 3,687,400 bushels of grain handled during the year.

The St. Paul (Minn.) Distilling Company claim they have the largest distillery in the world. When running at full capacity they consume 5,000 bushels of rye per month, 8,000 bushels of barley per month, and 8,000 bushels of corn per day.

The Crookston Mill, Elevator and Stock Company has been incorporated at Crookston, Cherry Co., Neb. The capital stock is \$5,000; Joseph Langlois and W. Keiterbush & Co. are the heaviest shareholders. The company will build and operate a mill and elevator.

C. J. Fisher, who kept a bucket shop at 56 New street, New York City, failed Dec. 26, for \$100,000. Mr. Fisher had no less than twenty-five private wires to offices out of the city, and did a large out of town business. It is said that he lost about \$120,000 during the last year.

Mr. J. G. Johns, who has been buying grain at Eureka, Kan., says that the six grain houses of that place bought 600,000 bushels of grain in 1888, mostly wheat and flax. Mr. Johns will hereafter be with the grain commission house of Rogers & Johns of Milwaukee and Minneapolis.

D. E. Shook, wheat buyer at Stephen, Minn., for the Red River Valley Elevator Company, shook the dust of Stephen from his feet Dec. 21, and went to Manitoba with several thousand dollars of the elevator company's and over \$1,000 of the business men's of Stephen, which he had borrowed to buy wheat with.

The Ashland Mill and Electric Light Company have filed articles of incorporation to carry on business principally at Ashland, Neb. Among other things the company will carry on a milling business and buy and sell grain, flour and feed. The capital stock is \$30,000, and the incorporators are W. J. Bryan, E. C. Panoast, W. J. Durkee, S. G. Bryan, J. S. Tewksbury and W. R. Vaughn.

Taloga, Morton Co., Star: Flax does much better in Kansas than in Iowa or any of the states east of the Missouri River. Here it will yield from fifteen to twenty bushels of seed to the acre, while in Iowa and the other states referred to it scarcely goes over twelve. That is quite a difference, when it is considered that in the West the plant is only utilized for the seed and feed purposes. The day may come when the fibre will be used in making linen and fine paper, but as yet it is thrown to waste. However, we will say that fifteen bushels of the seed is worth thirty dollars for feed purposes.

A despatch from Stewart, Minn., dated January 8, says: "There has been no little excitement in our village commencing on Saturday morning last by the appearance of a gentleman from Fairbault with an order from his firm on their house here for 10,000 bushels of wheat, this being largely in excess of the total amount in store in their elevator here. On yesterday farmers and others holding storage tickets took the 'bull by the horns' and removed over one thousand bushels. And this morning the door was broken down and another lot of storage wheat removed. A little later the sheriff took possession of the elevator at the instance of the First National Bank of Glencoe, they holding storage tickets to the amount of 3,500 bushels."

N. P. Bowsher, South Bend, Ind., reports the following sales of Bowsher's combination feed grinding mill: M. J. Disher, Plymouth, Ind.; M. C. Thomas, Homer, Ill.; Paul Miller, Bloomville, O.; Platt & Mabbitt, Sedalia, Ind.; L. Trabue, Girard, Ill.; Jas. Jackson, Rich Valley, Ind.; Geo. Ensley, Coldwater, Mich.; S. A. Guard, Allegan, Mich.; F. E. Fouts, Deer Creek, Ind.; W. F. Widner & Co., Deshler, O.; Irwin Shockley, Madison, Ind.; D. O. Colwell, Edina, Mo.; G. W. Mapus, Castalia, O.; A. B. Keepert & Co., Logansport, Ind.; F. B. Miller, Muncie, Ind.; Mark L. Teltor, Mt. Carmel, Ill.; Chas. V. Gay, Camp Point, Ill.; Cannady & Williams, Selma, Ind.; J. H. Mitton, Ridgetown, Ont.; E. E. Fulton & Co., Dayton, O.; Chas. Babcock, Salt Creek, Ind.; Hollingsworth & Radcliff, Galveston, Ind.; Wm. Light, Berrien Springs, Mich.; Wm. Strond, Sturgis, Mich.; Jno. Morlock, Plymouth, Ind.; Peter Jacobs, Eberle, Ill.; Peter Hilgert, Marble Corner, Ind.; H. Mc. Chesney, Geneva, Ill.; Marshall Miller, Bagleton, Wis.; A. Yingling, Yorktown, Ind.; P. Bruhm, Pevely, Mo.; C. B. Dustin, Summer Hill, Ill.; Jas. Stough, Linkville, Ind.; D. T. Harbison, Robinson, Ill.; Aug. Trumer, Greenville, Ill.; Allan D. Stone, Portland, Mich.; B. A. Kavable, Prospect, O.; A. B. Rettig, Holgate, O.; J. A. Williams, Walkerton, Ind.; Simon Will, La Porte, Ind.; Lowman & Yocum, Roann, Ind.; Jas. M. Koons, Exchange, Ind.; Geo. Prather, Edgewood, Ill.; S. D. & C. M. Wesner, Flat Rock, Ill.; Chas. Golterman, Foristel, Mo.; F. E. Ward, No. Warren, Pa.; Brinton Walters, Christiana, Pa.; George Viertel, Boonville, Mo.; Vollbrecht Bros., St. Michael Station, Minn.; J. W. Shearer, Blocher, Ind.; Jas. King, Osseo, Mich.; M. Widener, Bowling Green, Ind.; Chester T. Patter, White, Mich.; Haynes, Hall & Co., Danville, Ind.; Peter E. Good, Etna Green, Ind.; Sam'l. Snyder, Deacon, Ind.; O. L. Weatherwax, Pittsford, Mich.; L. D. Price, Swanton, O.; Wm. Voigt, West Salem, Ill.; Rogers & Perot, Mishawaka, Ind.; W. O. Vickery, Ingerham, Ind.; W. H. Carr, Edgerton, O.; Wm. Dean, Griggsville, Ill.; John Dardeen, Allendale, Ill.; Thole, Theiss & Co., Walshville, Ill.; Marburger & Addens, Mt. Olive, Ill.; W. J. Snyder, Huntertown, Ind.; O'Brien & McGallard, Upland, Ind.; J. W. Harris, Fairmount, Ind.; A. B. Carpenter, Defiance, O.; W. A. Barr, Ridgeville, O.; A. Greismer, Lancaster, Ill.; Maxwell & Son, Flat Rock, Ill.

ITEMS FROM ABROAD

Stocks of wheat at Liverpool on Jan. 1 were 4,544,000 bushels, against 6,160,000 bushels a year ago.

A \$1,000,000 failure in the corn trade at Amsterdam is reported by cable—the result of the collapse of the Austrian corn clique.

The Hungarian syndicate formed some months ago for the purpose of controlling the price of corn (maize) has collapsed with a loss which is estimated at \$1,250,000.

France imported 7,225,734 cwt. of wheat in 1888, and 216,958 cwt. of flour, an increase of 75 per cent. in wheat and 200 per cent. in flour as compared with 1887.

Shipments of wheat from India from April to Oct. 6 have been 22,312,000 bushels, against 21,504,000 bushels last year for the same time and 28,056,000 in 1886. Of this year's exports about 55 per cent. went to England and the rest to the Continent.

Mr. Flies, a well-known broker of Buenos Ayres, estimates the amount of wheat available for export to Europe from the new crop of the Argentine Republic at 9,000,000 bushels, and this owing to an increased acreage. The British consul at Buenos Ayres indorses these figures. This amount of wheat will reach Europe when the supply is likely to be running shortest, that is to say, in the later winter or early spring months. The surplus maize for export is placed at about 15,000,000 bushels.

The imports of wheat and wheat flour into the United Kingdom from Russia during the eleven months ended Nov. 30 were equal to 35,973,340 bushels, against 6,016,563 bushels the corresponding eleven months in 1887, being nearly sextupled. Comparing the imports of wheat and flour into the United Kingdom from the United States for the corresponding eleven months, they are in 1888 53,736,931 bushels, against 84,865,071 bushels in 1887 for the corresponding period, a falling off of 31,128,135 bushels, chiefly from Atlantic ports.

The United Kingdom, France, Belgium, Holland, Norway, Sweden, Germany, Switzerland, Italy, Spain and Portugal will in 1888-'89 have large requirements in addition to their own crops. Russia is relied upon to make up British requirements. The stocks in the United Kingdom have been placed at about 22,000,000 bushels; in France, about 12,000,000 to 14,000,000 bushels; in Belgium, about 7,500,000 bushels; in Germany, 4,000,000 to 5,000,000 bushels; in Austria Hungary, 11,500,000 bushels; in Odessa (uncertain), 15,000,000 to 16,000,000 bushels, and other South Russian ports estimated, including stocks on Azov, about 10,000,000 bushels. The stocks indicate that Russia will have an export surplus in 1888-9 larger than in 1887-8, when the aggregate export was about 115,000,000 bushels.

In the summary of the British Agricultural Statistics the wheat crop is given at an average of 28.05 bushels for Great Britain. The average for Scotland is given at 31.12, for England at 28.18 and for Wales at 21.36. According to this estimate the British wheat crop of 1888 shows a reduction of fully four bushels per acre as compared with 1887. For barley, the average for Great Britain is given at 32.84 bushels, as against 31.32 for 1887. Scotland again shows the best results. In this crop the average for the northern part of the kingdom is 38.86 bushels. As regards the crop of oats, the average for Great Britain for this year is given at 37.24 bushels, as against 34.74 last year. The average for Scotland is stated at 34.46 bushels; but that of England is 40.11; and Wales, 30.02. The oat crop, therefore, is the only one of the three cereals estimated in which the English shows better results than the Scotch crop.

Says the *Millers' Gazette* of London, Eng.: "It is stated that the report of the Corn Averages Committee, after dealing at some length with the manner in which the system of taking corn returns is at present worked, and its bearing upon the question of the Tithe Rent Charge, expresses the opinion that the corn inspectors should in all cases return the weights per bushel as well as the prices of the grain sold, and that care should be taken, if possible, by the adoption of some system of supervision, that the conversion of the prices to correspond to the weights of the Imperial bushel, as fixed by Mr. Chamberlain's Act of 1882, should be invariably carried out by those charged with this duty. The committee recommend, first, that the annual average price should be arrived at by adding up the quantities and values for the whole year and dividing the one by the other, the records of the weekly prices being maintained as at present; and secondly, that the provisions of the act of 1882 should be more vigilantly enforced, especially with reference to the returns of oats."

GRAIN IN PHILADELPHIA.

The receipts of wheat in Philadelphia for the year 1888 were 2,555,600 bushels, against 9,270,861 bushels the previous year. The exports were 1,371,609 bushels, against 8,817,164 bushels during 1887. The receipts of corn were 2,555,600 bushels, against 4,033,000 in 1887, and the exports 817,169 bushels, against 2,286,258 bushels the previous year. The receipts of oats increased from 3,915,200 bushels in 1887 to 4,662,750 bushels in 1888.

CHICAGO BOARD OF TRADE CLEARINGS.

The Chicago Board of Trade Clearing House did the following business for the year:

Months.	Clearings.
January.....	\$ 3,963,633.25
February.....	3,441,287.50
March.....	4,632,462.75
April.....	7,954,200.75
May.....	11,342,886.75
June.....	10,234,877.50
July.....	7,616,007.50
August.....	9,739,609.50
September.....	12,159,563.00
October.....	20,361,082.73
November.....	7,522,665.00
December.....	6,790,480.00
Total.....	\$105,758,106.32
Year 1887.....	79,149,869.08
Year 1886.....	100,000,000.00

HONEST VS. DISHONEST SPECULATION.

It is evident from the discussion going on in the press and elsewhere regarding speculation and speculative operations, that many of the persons discussing the subject fail to recognize the fact that there is, or can be, such a thing as legitimate and honest speculation. In these days it is true that a person may easily be pardoned for such a failure, for the speculations which are neither legitimate nor honest seem to predominate so largely as to make the other kind almost unnoticed. Nevertheless, there is always a great deal of speculation going on which is not only legitimate, but positively beneficial to general commercial and manufacturing interests, performing for them an office similar to that performed by the fly-wheel of an engine.

Sudden and violent fluctuations in the prices of raw materials are by no means to be desired by the manufacturer, for they often seriously interfere with manufacturing operations and make the outcome of contracts entered into doubly uncertain. A manufacturer who makes a proposal to furnish certain articles at a certain price must be reasonably certain that the materials of which those articles are made will not double their price before the contract can be filled; and it is just such sudden, violent and disastrous fluctuation which legitimate speculation tends to prevent.

If, by reason of an unusually heavy production of any certain crop or commodity, or by a great falling off in consumptive demand, the price of that commodity begins to fall, it may soon reach a point at which any person thoroughly familiar with the world's average production and consumption of that article, and sagacious enough to estimate at their true value the temporary causes tending to lower prices, can perceive that there will be a probability of profit by purchasing, to be again sold when prices shall be restored to or above their normal figures. The legitimate speculator having the capital necessary for such operation buys when this point is reached, and his purchases have a direct tendency to prevent prices going as low as they otherwise would; and if there are enough others like him, their combined purchases may constitute a demand sufficient to arrest the downward tendency, though this will of course be a speculative, instead of a consumptive demand.

Now if by reason of falling off in production, or a large increase in the demand for immediate consumption, prices show a tendency to rise to an unnaturally high figure, they soon reach a point at which there is a profit to the speculator in selling his accumulated stock, and his selling has a direct tendency to check the rise in prices.

The effect upon business of this sort of speculation is exactly like that of a fly-wheel upon an engine crankshaft; which, when there is a surplus of energy over and above what may be needed, takes it up; and, when a sudden demand is made for more power, gives it out again; thus keeping the fluctuation of speed within certain narrow limits. But some power goes into a fly-wheel which is not again given out in useful work, but is expended in fanning the air, and in friction caused by the additional weight; yet this loss of power is borne in consideration of the benefits secured. So it is with the legitimate speculator; he may take some money, but the amount will be very small compared with the volume of business affected by his operations, and can well be afforded by the producing, manufacturing and business interests.

It is only the speculators who are in reality gamblers, and who resort to gamblers' methods, that work injury to manufacturing and commerce.

When a speculator so operates as to produce artificial conditions of scarcity or plentifulness of the things in which he operates, and attempts to affect prices in his favor by such means and by the deceit and misrepresentations which necessarily accompany them, and when, instead of actually buying the things dealt in, he deals in margins, options, etc., he becomes a gambler, whose operations, instead of tending to prevent sudden and violent fluctuations, usually have a direct tendency to produce them; to unsettle business, and add uncertainty to manufacturing and commercial operations. It is this sort of speculator whom the people should take measures to protect themselves from; but in doing so the difference between speculation which is robbery and plunder, and that which is harmless, or even beneficial, should be distinctly borne in mind. We frequently hear it declared

that "speculation in the necessities of life is robbery, and must be suppressed." It depends upon the character of the speculation. A man who honestly thinks that natural causes will bring about a rise in price of commodity in anticipation of that rise, has an undoubted right to do so, so long as he refrains from employing the methods of the gambler, and from bringing unnatural influences to bear for the purpose of affecting prices.

The reform of any great wrong is always retarded, if not entirely thwarted, by a failure to make a clear distinction between that which needs reforming and that which does not need it.—*Exchange*.

THE EXCHANGES.

The Chicago Board of Trade is to have an athletic club.

The St. Louis Merchants' Exchange elected new officers on Jan. 8.

The Toronto police have again raided the bucket shops of that city.

Tickets of membership to the New York Produce Exchange have ruled dull at \$1,225.

W. T. Carrington has been elected president of the Toledo Produce Exchange and Denison B. Smith secretary.

The Chicago Board of Trade has wound up its Stock Exchange annex. The experiment cost about \$6,000, which was not much, considering.

The Duluth Board of Trade "respectfully ask and petition the Hon. William R. Merriam, governor-elect, to select and appoint as one of the members of the State Board of Railroad and Warehouse Commissioners some capable citizen of Duluth."

At the auction of table privileges on the Chicago Board last week, 144 privileges netted the Board \$6,464.50; so that with rentals from the same source of \$1,840, the Chicago Board gets \$8,300.50 from its tables. Many of the privileges brought over \$100, the highest being \$160.

The annual election for officers of the Chicago Board of Trade was held on Monday, Jan. 7, with the following result: President, W. S. Seaverns; second vice-president, E. W. Bailey; directors, H. H. Aldrich, R. G. Chandler, C. B. Congdon, A. C. Helmholz and Adolph Seckel; appeals committee, H. F. Dousman, J. C. Hatley, John Hill, Jr., C. L. Hutchinson, Edmund Norton; arbitration committee, C. M. Armstrong, John M. Flisk, Geo. A. McClellan, Geo. S. McReynolds, Chas. A. Weare.

The new building of the Cincinnati Chamber of Commerce will be dedicated on Wednesday, Jan. 30. Says the *Price Current*: "The building is not so large as some others of its kind, but in boldness and harmony of architectural design it commands admiration surpassing that of any other structure in the West. It occupies ground fronting 100 feet on Fourth street and 150 feet on Vine street, to Burnet street. From the Fourth street sidewalk to the cornice is 113 feet, and the extreme elevation of the roof is 75 feet higher."

The New York Produce Exchange Reporter says: There has been so much opposition to this objectionable system manifested recently, but especially since the Foster affair, that the members have been considering various schemes calculated to afford them some relief from the excessive burden imposed by the present method. Many of the members, but particularly the younger ones, are in favor of abolishing it entirely; but as this could scarcely be accomplished without great difficulty, milder remedies are contemplated. A well-known broker makes the following suggestion, which is unquestionably worthy of careful consideration, namely: "To reduce present full rates to \$5,000, then let each new member begin at \$1,000, increasing \$1,000 each year until \$5,000 is reached. Stop accumulating fund at \$1,000,000, and apply interest to death rate with this result:

Fifty deaths per year.....	\$ 5,000	\$250,000
Interest on \$1,000,000 at 4 per cent....	40,000	
\$70 per year for 3,000 members.....	210,000	
Total.....	\$250,000	\$250,000

"As each membership is not entitled to full rate, the average amount paid would not reach \$5,000, and with low rates for new members the actual cost would probably run between \$50 and \$60 instead of \$70 as above."

The old grain commission firm of J. H. Herrick & Co., New York City, are closing up their affairs and will retire from business. Of late the firm has not done much trading, and for several years Mr. Herrick has devoted considerable time to the affairs of the Exchange.

The Indianapolis Grain and Feed Company is the title of a new association formed by members of the old firm of J. A. Closser & Co. The company has filed articles of incorporation and will do a grain, flour and elevator business. The capital stock is \$20,000 in shares of \$100. The directors are Milton A. Woolen, George W. Johnston, Horace E. Kinney and Charles J. Colgan.

THE AMERICAN ELEVATOR AND GRAIN TRADE.

— PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY —

MITCHELL BROS. COMPANY.

(INCORPORATED.)

— OFFICE —

Howland Block, 184 and 186 Dearborn St.,
CHICAGO, ILL.

Subscription Price. - - - \$1.00 per Year
English and Foreign Subscriptions, - - 1.50 " "
English and Foreign Subscriptions may be sent to W. H. Smith &
Son, 186 Strand, London, W. C., Eng.

A. J. MITCHELL, - - - Business Manager.
HARLEY B. MITCHELL, - - - Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JANUARY 15, 1889.

THE GOVERNMENT CROP REPORT.

The main facts and figures of the Government Crop Report are given on another page. The report was published several days later than the date of the last yearly report, which was made on Jan. 7, 1888. The result, however, fully justifies the delay on the part of Mr. Dodge, for the report everywhere gives evidence of a vast deal of work on the part of the Department.

The result as to corn and oats is about what was anticipated, although some extravagant guesses have been current as to the quantity of each of these crops. A grand total of 1,987,790,000 bushels of corn is sufficiently formidable, and 701,737,000 bushels of oats is quite flattering to national pride. As to wheat, the total of 414,818,000 bushels is a surprise to most people. But it must be remembered that this estimate is in measured bushels. The corrections in bushels by weight will be made in March. This later showing will no doubt reduce the wheat crop figures to 385,000,000 bushels, or possibly a little more. The task of computing the immense crops of our immense country is not an easy one, and Mr. Dodge deserves credit for his report, which, so far as we have seen, has met with less caviling from experts than usual.

DAKOTA ELEVATORS AND THE WAREHOUSE LAW.

The report of Dakota's Railroad Commissioners, which was recently submitted, shows that some of the warehouse firms in central and southern Dakota have ignored the grain warehouse law passed in 1887. Among other things the law requires public warehousemen to procure a license, furnish a bond for each and every warehouse operated, to keep in a conspicuous place in each warehouse a sample of the existing grades of grain; also to keep posted to the public view a copy of the grain warehouse law.

The warehousemen referred to claim that the definition of the term "public warehouse" given in section 4 of the warehouse law exempts them from the requirements of the law. The section enacts "that all elevators or warehouses in this territory in which grain is stored for compensation are hereby declared to be public warehouses." To evade this the Board says, these warehousemen adopted the ingenious plan of accepting grain for storage in Minnesota only. That is, the

contract between the warehouseman and the party storing grain with him, provides always for such storage at some point in Minnesota, and for delivery in that state.

Although the law was most undoubtedly intended to embrace all warehousemen doing business in Dakota, whether it does or not would have to be decided by a court, and as the Board had no funds at its command for that purpose the question still remains undecided.

GRADE-MIXING AT MINNEAPOLIS.

The Duluth grain men are complaining that the state inspection laws permit a big discrimination against them, and greatly favor the private houses of Minneapolis. The fact of the matter is that Minneapolis has seven private warehouses while Duluth has none. These houses have been receiving the benefit of the state inspection without being obliged to conform strictly to the laws regarding the mixing of grades. All of the Duluth elevators are public warehouses and are subject to the state laws which do not permit mixing grades. The unlicensed houses of Minneapolis have been buying low grade wheat and mixing enough good wheat with it to raise the grade of the whole amount just enough to pass as No. 1 hard or No. 1 Northern. Whatever is in quality between the minimum, for instance, of No. 1 Northern and the minimum of No. 2 Northern goes into the public warehouses as No. 2 Northern, making the average of the whole a medium between what is popularly termed "high grade" and "skin grade." The private houses only raise their wheat to "skin grade," and when it is put in the cars the state inspectors give it the benefit of the state grades.

However, the report comes from Minneapolis that the state inspectors have refused to inspect "skin grade" grain from private houses, as of the grade to which it belongs under the minimum rule, but give to it the next grade below. This in a measure makes a double system of grading, for the "skin grade" received from the country shipper is allowed to pass, while that from the private elevators of the city is given a lower grade. If they allow the "skin grade" of the mixing houses to pass they discriminate against the public warehouses and lower the standard of Northwestern grades. The spring wheats of Dakota and Minnesota have always maintained a high standard in the markets of the world, and it is to be hoped that they will not be allowed to decline.

BALTIMORE'S GRAIN EXPORT TRADE.

The corn export trade of Baltimore is having a boom. It is reported that all the elevators are full, and loaded cars are side-tracked as far north as York, Pa. About 200,000 bushels were loaded on the 1st instant, and forty-five steamships have been chartered to take cargoes of corn during the month, mostly for European ports. It is very likely that the city will have a heavy export trade for the next three months. The corn trade for the last year was not very satisfactory. The receipts were the lowest for fifteen years, except in 1882, when only 3,401,308 bushels were received. In 1885 and 1886 over 15,000,000 bushels were received, while in 1887 the receipts fell to 9,126,699 bushels, and in 1888 to 6,943,839 bushels. The amount exported has not been less for sixteen years, except in 1882, when only 1,371,823 bushels were exported. Last year 4,173,343 bushels were exported, against 7,158,432 bushels in 1887, and over 14,000,000 bushels in 1885 and 1886. The exportation of corn in December was more than double that of any other month of the year, being 1,090,176 bushels.

The receipts and exports of wheat were smaller than any year since 1876, when the wheat trade was very light. As compared with 1887, the receipts of wheat were light every month, the total being only 7,004,443 bushels, against 13,159,486 bushels for 1887, and 12,310,534 bushels for 1886. The monthly exports were also light, and not a bushel was exported during the last

two months of the year. The total was 4,161,129 bushels, against 10,717,353 bushels for 1887, and 10,575,290 bushels for 1886.

The receipts of oats were 2,110,028 bushels, being more than for any year for sixteen years. Last year the receipts were 1,810,280 bushels, and 1,809,258 bushels the preceding year. The exports, although light, as compared with the receipts, exceed the exports of the last two years. Last year the amount exported was 5,670 bushels, against 33,620 in 1885. In 1886 and 1887 only a little over 1,000 bushels were exported. The receipts of rye were 200,363 bushels; of barley, 446,751 bushels. No rye has been exported for three years, and the amount of barley exported has been less than 100 bushels.

Baltimore has excellent facilities for handling grain, and there is no reason why she should not have a large share of the export trade of the country. On the 4th inst. it was estimated that 4,000,000 bushels were in the elevators or on the way to the city for shipment.

THE GRAIN GROWING POSSIBILITIES OF THE DOMINION.

The January number of the *North American Review* contains a long article entitled "The Greater Half of the Continent," by Erastus Wiman, in which is given an exhaustive account of the resources of the Dominion of Canada, the vast extent of its boundaries, its illimitable supply of timber, its unsurpassed mineral wealth, its "more than half of the fresh water of the entire globe," and among many other things of great importance to an annexation agitator, Mr. Wiman writes at length on the great agricultural possibilities of the Dominion.

Mr. Wiman traces the course of the wheat growing belt from the Genesee valley, the great wheat growing region of early days, down through the Ohio valley, into Illinois and Iowa and then up to Minnesota and Dakota. He seems to be of the opinion that its course will continue to be northward and in a few years the great wheat producing region of this continent will be on the other side of the 49th parallel. Mr. Wiman says "that Canada possesses wheat areas that have all of the advantages of our great wheat region, and are richer, more fertile and greater in extent."

We agree with him when he says that "It would be a startling statement to show that even in its extreme northern latitudes the Dominion possesses a greater wheat producing area than does the entire United States; that the soil is richer, will last longer, and produce a higher average of better wheat than can be produced anywhere else on the continent, if not in the world." It is enough to startle almost any one who has ever heard of the frozen wilds of Northern Canada. He claims that the altitude of Canada, which he gives at 400 feet less than the United States, the marine currents, and the great area of fresh water, which he gives at 130,000 square miles, have a beneficial effect upon the climate. Admitting the severity of the long Canadian winters he does not stop to think how much more severe they would be without the "beneficial effects" of these mitigating agents, but leaves the climate in its high state of perfection (?) and goes down "underneath the whole surface of the vast and fertile wheat-producing area," and there finds "a well-spring of moisture that continuously exudes and feeds the delicate tendrils of the roots sent down into the earth by the wheat plant for sustenance." The winters are so severe and so long that one can find frost in the ground at any time of the year.

Mr. Wiman finds another advantage in the fact that the days in Northern Canada are two hours longer than the days of any other wheat-producing region.

With these many advantages in their favor he says that a mere handful of settlers in Manitoba produced in 1887 a surplus of 12,000,000 bushels of wheat, 7,000,000 bushels of barley, and 2,000,000 bushels of potatoes, the average yield of wheat per acre being thirty bushels, while nowhere else on the continent did it exceed twenty

bushels to the acre, and in Minnesota and Dakota it did not average more than fifteen bushels. While Northern Canada may have a bright future as a wheat growing region, and we hope it has, yet the many possibilities pictured by the enthusiastic Mr. Wiman can hardly be classed as probabilities, for if such the land would have been settled long ago, it would seem to us.

A BLOW TO WHEAT-MIXERS.

In the test case regarding the inspection of mixed grades of wheat, which was appealed to the Minnesota Railroad and Warehouse Commission by George Spencer & Co. of Duluth, the Board sustained Inspector Sheeley in refusing to inspect the mixed grain. The appellants had some wheat in Elevator "E" at Duluth, where the grain of different owners is mixed together, but all the grades are kept separate. A car was loaded from the elevator with 450 bushels of No. 1 hard wheat and 150 bushels of Northern wheat, the grain being well mixed when loaded. The inspector was asked to inspect this so that it could be replaced in the elevator as a new grade, but knowing the facts he refused, claiming that it was against the law to mix the grades.

The state warehouse and grain law provides that "It shall not be lawful for any public warehouseman to mix any grain of different grades together, or to select different qualities of the same grade for the purpose of storing or delivering the same, nor shall he attempt to deliver grain of one grade for another, or in any way tamper with grain while in his possession or custody with a view of securing any profit to himself or any other person, and in no case even of grain stored in a separate bin shall he be permitted to mix grain of different grades together while in store."

The Board held that the grain had not been tendered to the public warehouseman "in the usual manner in which such warehouses are accustomed to receive the same in the usual course of business" as required by the law, and therefore it should not be inspected and returned to the elevator. To allow such an action would be an injury to every one owning grain in the warehouse and be a violation of the conditions of the bonds of the elevator company. The decision is an important one and will go hard with the grain mixers who have been doing a big business, especially at Minneapolis.

THE MINNESOTA FARMERS AND THEIR VIEWS.

The farmer in this free and enlightened country is not slow to express his views and voice his demands. This is particularly so when he has organized himself and his neighbor into a grange or alliance, and considers himself quite equal to the task of regulating most things in this mundane sphere. And perhaps it is justly the farmer's due to admit that some of the results of his agitation have crystallized into good and equitable laws. That is not always true, however. In a recent address of the Minnesota State Farmers' Alliance, the members are congratulated over a number of things, among which the following are stated: "The Minneapolis Millers' Association, which held despotic sway over our wheat market, has become a thing of the past. Railroad rates have been greatly reduced, discriminations prohibited, a board of commissioners appointed and laws enacted for the protection of the people from extortion and injustice, in the transportation of grain, as well as in unjust weights and grades."

Perhaps the aims of the Minnesota Farmers' Alliance may be best understood from some of the resolutions adopted at the last meeting, which occurred the second week in the present month. Among those introduced were the following:

Resolved, That we are in favor of the present system of inspecting and weighing grain, with such amendments as may be deemed necessary to perfect the law.

Resolved, That the Farmers' Alliance of the State of Minnesota in convention assembled demand that the legislature of this state, during its present session, shall enact a law making it obligatory upon each elevator and

warehouseman doing business in this state to become responsible to the ticketholders for the grade, weight and samples made by him as the owner of such warehouse or elevator, and that he shall be under the supervision and control of a public examiner appointed by the board of railroad and warehouse commissioners; and that the said commissioners shall have full control over these local warehouses and elevators, similar to the control that they now have over the elevators at the terminal points, St. Paul, Minneapolis and Duluth, provided it is not the intention of the alliance to bond country elevators.

Resolved, That we are in favor of a law compelling railroads to put in track scales at stations where 25,000 bushels of grain or more are shipped annually.

Resolved, That we are in hearty accord with the principles of the Interstate Commerce Law and state railroad laws, and ask the legislature to memorialize congress to resist all efforts to repeal or modify the said Interstate Commerce Law, unless such modifications tend to strengthen said law and make it more effective.

It seems that in Minnesota and similar states the power of the farmer is on the increase, and it will be well if the movements of such bodies as the Farmers' Alliance are directed by conservative men of sense, who will not look upon legislation as the sovereign balm for all ills. Granger legislation in the past has frequently been disastrous, and it is to be hoped that the new crop of granger leaders who are in the saddle have not fastened their saddles upon hobbies.

NEW YORK'S GRAIN TRADE.

New York City, like other grain centers, shows the effects of the short crops and high prices in the decrease of her receipts and shipments. The aggregate receipts of grain, flour and meal at New York City during 1888 were equal to 104,188,687 bushels, against 128,794,374 bushels in 1887, a decrease of nearly 20 per cent. Comparing 1888 with 1886, there is a decrease of nearly 30,000,000 bushels. Boston and Baltimore took in flour nearly 20 per cent. of the decrease of 1888's receipts compared with those of 1887.

The export trade from New York makes a still more unfavorable showing. The exports in 1888 amounted (of flour and grain) to 45,040,445 bushels, against 73,827,229 bushels in 1887, or a decrease of nearly 40 per cent. Conditions, however, last year and this year have been exceptional, and it is to be expected that New York will recover a portion of the trade apparently lost, in the future.

COMMERCE AND WATERWAYS.

Last year it seemed as if our waterways were thoroughly fortified against any assault that the railways might make against them. This year, however, stimulated by the fact that the canals have carried less freight than last year, the railways have recommenced the fight against canals and are endeavoring to get possession of one, the Chesapeake & Ohio, and to prevent appropriations for another, the Erie.

All who are interested in the commerce of the country (and who is not?) have a very evident interest both in the maintenance of the present waterways and the construction of new ones as the exigencies of the case may demand. We may profitably study the experience of European countries in this matter. In England, there is a widespread revival of the interest in canals, and a number of great projects are in contemplation. Frankfort-on-the-Main, in Germany, presents a fruitful field of study in this connection. Two years ago, the canalization of the Main was completed to Frankfort. The traffic of 1887 shows nearly a fifty-fold increase over 1881, at which time Frankfort had sunk to the position of a mere financial center without any commerce. Moreover, this increase of traffic was a help to the railroads which showed a large increase of business at Frankfort over preceding years. Another case that may be cited is the improvement of the St. Lawrence between Quebec and Montreal for ocean-going vessels to a channel 27½ feet in depth. This improvement has resulted in a large increase in the amount of trade. The people should see to it that the fight against the waterways, present and prospective, prove bootless.

ONE of the amendments to the rules of the Chicago Board of Trade recently adopted, reads: "No contract shall be made or offered to be made by any member or members in the exchange room or in any public streets, courts or passages in the immediate vicinity, or in any hall or exchange hall or corridor in any public building located or fronting on any such streets, courts or passages, except at time of regular session," etc. The penalties provided are suspension or expulsion. It is said by some that the rule as amended is wide enough to reach members of the big Board who also do business on the Open Board. In that case there is likely to be some weeping and wailing and gnashing of teeth later on.

THE Minnesota Warehouse and Railroad Commissioners have been making inquiries and examining elevator men to determine whether or not the grain laws should be changed. Commissioner Austin, referring to this matter, said: "For some reason, there are no public elevators this year. None of the elevator companies are operating under the grain laws, either at St. Paul, Minneapolis or Duluth; and we are conducting this inquiry for the purpose of finding if it is the result of defects in the laws." The testimony of several grain men showed that the crop of 1888 was exceptional, and most of it could not be safely handled on the ordinary grades, so the companies were obliged to stop operating under the grain laws, and go into special binning.

JUDGE McCULLOCH, chairman of the Committee of Law Reform of the State Bar Association, includes in his report a chapter on manipulation in grain markets, or the running of "corners." He writes: "The demoralizing tendency of such a transaction engrossing the market can scarcely be over-estimated. But to such an extent is it winked at that if a bold speculator can entrap his antagonists to their ruin by engrossing the entire crop of a certain cereal, it matters not that ruined fortunes, blasted hopes, bankruptcy, and a cyclone of commercial disasters follow. The world looks on, laughs and applauds. For such an offense the law has no adequate remedy. Gambling contracts are touched by the law, to be sure, but little of their enforcement is heard. The Judge suggests governmental supervision and control as a remedy for this evil, saying: "If the alternative should be presented to all boards of trade, produce exchanges and other institutions of like character, that their business should be conducted on a lawful basis under the supervision of one or more public officers, or that they be dealt with as violators of the law, it is possible many of these abuses might be suppressed."

THE Chicago Board of Trade held its annual meeting on Jan. 14. The report of the treasurer showed that the receipts to the close of the fiscal year, Jan. 7, 1889, were \$267,155.47; expenditures, \$260,682.70; balance on hand, \$6,472.77. The treasurer reported that checks amounting to \$1,111.12 were outstanding. The financial statement of the board of directors is briefly as follows: One thousand, nine hundred and twenty annual assessments at \$90, \$172,800; other assessments collected, \$4,171.85; real estate department, \$37,883.49; total receipts from all sources, \$242,778.05. The total disbursements on account of interest on bonds, expenses, taxes, etc., were \$223,462.66; balance on hand, \$19,315.39. The directors congratulated the board on its improved financial condition. Bonds of the organization to the amount of \$50,000 had been purchased and canceled, and the report recommended that an equal sum be expended in this way each year until the indebtedness of the Board should be reduced to \$1,000,000, when it should be refunded into 4 per cent. bonds. The report recommends that the Call Board room be converted into offices, and that the tower be removed, and three floors of offices constructed above exchange hall. "It would be better to increase the revenues of the Board in this way than to try to derive too great an income from the sale of our market quotations."

Editorial Mention.

THE stocks of wheat at Duluth are a little over a million bushels; at Minneapolis, about eight million bushels, and at New York, nine million bushels.

THE cable brings the intelligence that the Exchanges in several Spanish cities are preparing a petition to the Cortes to impose a tax on imported grain and flour.

It is intimated that the insurance companies doing a lake marine insurance business are to form a "combine," for the alleged purpose of crowding foreign companies out of the field.

MESSEES. J. L. OWENS & Co. of Minneapolis write us that their fall and winter trade was very satisfactory. Among their recent orders was one of satisfactory proportions from South America.

H. W. CALDWELL of 131 & 133 W. Washington street, Chicago, the well-known conveyor man, has issued a very handsome calendar for 1889 which he will send to those of our readers who will write him for it.

It is said the foreigners are short in this market to the extent of five million bushels of wheat, and Minneapolis as much more. The long lines held here by big operators are said to amount to between twelve and twenty million bushels.

WHETHER on good authority or not, it is stated that some of the Minneapolis bulls have veered around and unloaded cautiously. Moreover, it is said that some of the millers are disgusted at the failure of the wagon to start on time as promised.

N. P. BOWSER of South Bend, Ind., manufacturer of Bowser's Combination Grinding Mill, writes trade is very fair and prospects never better. He adds that the feed-grinding public find that his Combination Mill is just what they want.

THE New York Produce Exchange is again about to make an effort to get its quotations sent all over the country, in the hope of supplanting Chicago as the great central grain market. We hardly expect any such move to be successful for a long time yet, if ever.

REPORTS from the Pacific coast, and especially from California, show a large increase in the acreage sown to wheat and barley over all former years. The season so far has been very favorable, and the prospects are that the crop of wheat will exceed any produced heretofore.

BUCKET SHOPS are running full blast in Chicago, in spite of all that has been done by the Board of Trade to suppress them. A brave fight was made against them for a long time, and a continuance of the old policy, it would seem, must inevitably lead to their extinction.

THE Corn Palace City is making preparations to send a train of seven cars to President Harrison's inaugural, which will be decorated on the outside with corn exclusively, and on the inside with corn and cereals. The cost of the decorations is estimated at about \$400 per car.

It is supposed that one of the first official acts of Governor Fifer of Illinois, will be to reorganize the Railroad and Warehouse Commission. The Commission is composed of three members, one selected from the Northern, Central and Southern portions of the state. It is said that

there are fifty-three applicants for places on the Commission. P. Bird Price, it is expected, will be reappointed Chief Grain Inspector. At all events he ought to be reappointed.

THE annual corn show of the state of Nebraska will be held at Lincoln to-day. It is claimed that the exhibit will be much finer than that of the last state fair. The specimens will be the finest to be found in the state, and the entire exhibit will be sent to the great exposition at Paris.

THE N. Y. Produce Exchange statement of the visible supply on Saturday, Jan. 12, was as follows: Wheat, 37,498,541 bushels, decrease 424,833; corn, 11,842,292 bushels, increase 1,701,242; oats, 8,434,108 bushels, decrease 187,346; rye, 1,687,251 bushels, increase 21,677; barley, 2,611,884 bushels, decrease 158,130.

MESSEES. MARTIN D. STEVERS & Co. of this city sent us a handsome New Year's card. This reminds us that this is one of the oldest commission houses now doing business in Chicago, having been established in 1864. It is therefore entering upon its twenty-fifth year, which is indeed a long history for this city of Alladin's Lamp.

THE *Journal of Commerce* of Baltimore, has appeared in a new form and the typographical and editorial departments have been improved. The proprietors say that they are going to make it the standard grain and flour journal of the seaboard. They have made a good start in that direction and have our best wishes for success.

It is intimated that handsome Mr. Seaverns, the new president of the Chicago Board, will have a big job on his hands. Not only are bucket shops running full blast, but "privilege trading" is indulged in to an extent that affects the market. The worst feature of the situation is that if the disciplining commences some of the big houses will have to catch it.

UNLESS appearances are deceptive, M. de Lesseps and the Panama Canal are hopelessly in the broth, along with the 600,000 stockholders in that great enterprise. It is to be regretted that after his great achievements de Lesseps should appear in the role of a charlatan; but his recent utterances and actions would seem to brand him as a great humbug as well as a great engineer.

SPECULATORS abroad have been learning the intricacies of the "corner," and in Vienna they have been working one in corn. It collapsed, however, and the manipulators were from \$20,000,000 to \$25,000,000 poorer for their attempt, while the price of corn dropped to about half of the price to which their previous manipulations had forced it. But they know all about corners now.

OF course the "boys" on all the Exchanges and Boards of Trade throughout the country had a grand old frolic the day before New Year's. Not even the sedate and elderly members were spared a bombardment with flour and grain whenever they came within reach of the flour bag brigade; and in Chicago, parties who tried to buy in the wheat pit, got most of their grain delivered in installments of a handful.

MESSEES. ENGLISH, MORSE & Co. of Kansas City, Mo., inform us that the past year was very satisfactory in the matter of business, with fine prospects ahead. They are making a specialty of power plants for all kinds of service, giving particular attention to electric light outfits. They are now representing the Heine Safety Boiler Co., and report some large orders. They still make a specialty of the Atlas Engines and Boilers, and have been shipping a number of plants for general manufacturing purposes, as well as some automatic engines for electric light work. Of the Atlas Engines they carry a large stock, ranging in sizes from 150-H. P. down. In pul-

leys and belting, both rubber and leather, their trade has been very satisfactory; and they also carry a large stock of the hoisting engines made by the Lidgerwood Mfg. Co.

THE Dominion of Canada, as a whole, has but little if any wheat to export, in spite of the large crop credited to Manitoba. It is said that in the latter province from one-third to one-fourth of the crop was frosted, deteriorating the quality so as to make a very appreciable difference in the commercial value of the whole crop which, before the frosts, was estimated at as high a figure as 12,000,000 bushels.

IN the case of H. R. Mellen against the New York and Chicago Grain and Stock Exchange, the Appellate Court has affirmed the decision of the lower court. Mellen made bets on the clock maintained by the Exchange, and lost heavily. Afterward he sued, and by a decision of the lower court recovered his losses on the ground that the clock was a gambling instrument. The Exchange appealed the case, with the result stated above.

A FARMER writing to the *Kansas Farmer* in regard to the belief that corn in Western Kansas is killed by the hot winds in August and September, claims that it is all a mistake, that the corn is killed in July when in the early stage of tasseling. At that time the tassel is very tender, and is withered by the hot winds, causing it to lose its fertilizing properties. Although the stalk continues to grow, if there is no pollen there will be no corn produced.

IN addition to their general business in pulleys, gears, mills, wire rope transmissions, etc., Williams & Orton Mfg. Co. of Sterling, Ill., have made a "hit" with their Charter Gas Engine. They have been compelled to increase their line of sizes to keep up with the demands made upon them for engines for purposes requiring more than 25-horse power. One of the elements of its popularity is that it makes its own gas from gasoline, so that the user is independent of gas works or machines, while the cost of the gas thus made is very reasonable indeed.

WE mentioned some time ago that an English gentleman, representing a syndicate, was in this country to look up machinery for a line of elevators in the Argentine Republic. J. A. McLennan, of Chicago, is the contractor, and has already shipped to Buenos Ayres material for two elevators of a million bushels' capacity. Mr. McLennan has now received a telegram from the syndicate ordering another similar elevator at once. All the machinery and iron work, even to the nails used, will be of American make. This is highly gratifying to Americans.

CONSIDERABLE difficulty was experienced in establishing the grades of wheat in Dakota and Minnesota for 1888 on account of the crop being damaged in some sections by frost. The quality of the wheat was so varied that it would have required the establishment of at least twenty grades to properly classify the frosted grain. At last it was decided that frosted wheat should be bought by sample, and that the standards of 1887 should be maintained. This, it seems, has proved satisfactory, and the prices have been higher at Duluth, St. Paul and Minneapolis than at some other points.

WHEN is wheat assessable in Dakota, is a question which is now before Judge Rose at Jamestown. The statutes provide that merchants' stocks and merchandise are assessable May 1, while all other property is assessable April 1. Elevator companies claim to be merchants buying and selling for a profit, and that their wheat assessment should be made May 1, the same time as the stock of other merchants is assessable. But they always reduce their stock previous to that date by shipping it out of the territory, and thus reduce their tax. On the first of last April the Northern Dakota Elevator Company had

100,000 bushels of grain stored in Lamoure county; on May 1 they only had 5,000 bushels. They were assessed on the amount in store April 1, which made a difference of nearly \$1,000 in their tax. The company protested before the county board of equalization and the assessor was sustained; they appealed to Judge Rose. This is only one of a number of similar cases which will soon be argued before the judge.

TACOMA, Washington Territory, is making rapid progress as a grain center. Last season the wheat crop in the Eastern Washington wheat belt amounted to 11,200,000 bushels, and the Willamette Valley in Oregon produced about 4,666,666 bushels, a great deal of which will find an outlet through Tacoma. Last year 1,829,333 bushels of wheat were shipped from Tacoma. The shipments for the coming season will be much larger.

MONTREAL'S aggregate receipts of flour and grain for 1888 were equal to 14,054,619 bushels, against 20,365,847 bushels in 1887, and over 21,000,000 bushels in 1886. There was a falling off of the amount exported from Montreal of over 8,000,000 bushels, the exports being 9,840,480 bushels, against 18,320,204 bushels for 1887, and over 20,000,000 bushels for 1886. A considerable part of the receipts were imported from the United States for different parts of the Dominion, the total amount imported by Canada from the United States being 8,914,402 bushels in 1887-'88, against 8,936,659 bushels in 1886-'87.

MR. P. B. WEARE, receiver of C. J. Kershaw, who failed eighteen months ago, at the collapse of the great Harper deal, declared a dividend of \$400,000 or 20 per cent. of the claims of the creditors, on Dec. 24. Mr. Kershaw turned over \$1,500,000, in claims against Cincinnati parties that pending litigation may make worth something. Mr. Kershaw now has a terminal elevator of a million bushels' capacity at Tacoma, Washington Territory, and is doing well. He is a plucky man and a hustler. Mr. Weare's announcement of a dividend was a surprise, and a very acceptable Christmas present to the creditors.

A RESIDENT of Apple River, Ill., Robert Irvine, is suing a Chicago Open Board of Trade firm for \$35,000, on a series of transactions extending over two years. From the plaintiff's account, it seems that he sent money for margins on deals until in September they had purchased for him 180,000 bushels of wheat, mostly purchased at about a dollar. When there was a profit of \$40,000 on his deals, Irvine ordered his brokers to sell. Then his brokers told him that they could not sell, for the very good reason that they did not have the wheat. Irvine thinks the case one-sided, and wants either the damages he sustained, or else his margins paid back to him.

WILLIAM F. MEADER, the grain merchant who was recently on trial in the District Court at Minneapolis, charged with selling 5,000 bushels of wheat belonging to the National Bank of Commerce, was found guilty. The jury were out only half an hour and their verdict was somewhat of a surprise, for it was generally believed that Meader had no knowledge of the transaction on which the indictment was based. He so testified when on the stand, and said his partner, D'Abraham, had charge of the wheat, and the buying and selling. Mr. Meader and his associates were interested in seven elevators besides the Pacific Elevator Company, and he had charge of the firm's finances.

ACCORDING to *Bradstreet's*, the stocks of wheat out of farmers' hands in the United States and Canada, east of the Rocky Mountains, on Jan. 1, 1889, were 52,740,403 bushels, against a total of 69,779,631 bushels a year ago. The stocks of Indian corn on the same date are given at 12,180,879 bushels, against a total of 9,625,159 bushels Jan. 1, 1888. The stock of oats out of farmers' hands on Jan. 1, 1889, is given at 11,431,840

bushels; of barley, 4,700,705 bushels; of rye, 1,856,942 bushels, and of flour, 2,102,143 barrels. All of these figures are for the country east of the Rocky Mountains.

THE periodical kick against the bushel and in favor of the cental is now on. Of course, a good deal can be said against the bushel as a measure, principally to the effect that every article has its own bushel; while with the cental system, a cental means always one and the same thing. The cental is already employed in some localities as the sole system of measurement; and much can be said in favor of its convenience; but the bushel is firmly fixed in the habits and thoughts of the Anglo-Saxon, so that it is doubtful if it be abolished as a measure for many years to come.

MINNEAPOLIS has another case of wheat stealing, and it was stolen from the same elevator that lost so much through an auger hole a short time ago. Wheat had been stolen from the Union Elevator, and on Dec. 14 a load was offered for sale at Stamwitz & Shober's flouring mill. The miller saw at once that the wheat had been shipped some distance, and when he inquired about it a young Bohemian, Frank Ort, who claimed to own the grain, said that it was raised on his farm near the city, and told the driver to take the wheat to his house. Afterward the driver gave the thing away, and Ort was arrested. It is reported that 100 bushels were found buried in trenches.

THE stocks of grain in Chicago elevators last Saturday evening were 4,595,510 bushels of wheat, 1,993,273 bushels of corn, 3,475,535 bushels of oats, 803,688 bushels of rye, and 189,718 bushels of barley. Total, 11,057,727 bushels of all kinds of grain, against 8,450,200 bushels a year ago. For the same date the Secretary of the Chicago Board of Trade states the visible supply of grain in the United States and Canada as 37,498,377 bushels of wheat, 11,841,783 bushels of corn, 8,433,863 bushels of oats, 1,686,694 bushels of rye, and 2,612,340 bushels of barley. These figures are smaller than the corresponding ones the week previous by 425,021 in wheat, and larger by 1,700,987 in corn. The visible supply of wheat for the corresponding week a year ago decreased 613,838 bushels.

THE Illinois Railroad and Warehouse Commission has made the following change in the rules governing the inspection of grain at Chicago: No claim for damages on account of error in the inspection on any lot of grain (except grain inspected from public warehouses in accordance with the law) will be entertained or allowed by the Board of Railroad and Warehouse Commissioners unless complaint of such inspection shall be made to the chief inspector before the grain in question shall be reloaded from the car in which it is inspected or before it shall leave the jurisdiction of the department. Grain transferred from the car in which it was inspected to another must be inspected after transfer to entitle the owner to have any claim arising thereunder considered by the Board of Railroad and Warehouse Commissioners.

THE Hon. Tom Elliott, legislator-elect from Ransom county, Dak., thinks that the elevator companies doing business in the territories should be required to guarantee the grading of their agents, and will probably introduce a bill in the next legislature to that effect. The object of this is to make it possible for farmers to get as good prices for their wheat when they ship it on their own account as the parties who buy and ship it. Mr. Elliott says that last season wheat sold for 25 cents less at Elliott than at Duluth, which allowed the buyer a clear gain of 10½ cents, for the cost of transportation and storage was only 14½ cents. If a farmer who had wheat stored in one of a Duluth company's elevators wished to ship the same to Duluth, he did so at the risk of having it graded lower by the same company than it had been by their agent at the shipping point.

DOTS AND DASHES.

It is said that Ream, Cudahy and Nat. Jones are again on the bear side.

Hutchinson owns 3,500,000 bushels of wheat in the Chicago elevators.

Rye was headed out on Christmas day in San Joaquin county, California.

The Panama Canal is not yet locked, but it appears to be damned.—*Washington Post*.

A Baltimore grain firm still in existence, some years ago cleared a cargo a day for a whole year.

It is said that during a recent week only 290 bushels of wheat were exported from the Atlantic ports.

There is no use, after all, in denying that the mouse has the best corner in wheat.—*Merchant Traveler*.

Sioux City promises to take along a husky crowd to Washington in her corn palace train.—*Pioneer Press*.

Over 18,000,000 bushels of wheat valued at \$15,000,000 were shipped from ports on Lake Superior last year.

An Iowa farmer who cribbed his corn early says that if the boards were taken from the crib the corn would stand alone.

The corn cannon which was shown at the Sioux City corn palace last fall will be shipped to Paris and exhibited at the exposition there.

Every business house except five elevators and one hardware store in the town of Auburn, Dak., was destroyed by fire Dec. 27.

A Chicago paper prints a list of people who own profitable corners, but nowhere appears the name of "Old Hutch."—*Pioneer Press*.

Iowa has discovered that she has no law to punish a person who sets fire to a stack of oats. Only wheat and hay are mentioned in the statute.

Corn is a maize, and a dance is a maze, which is pretty conclusive proof that there is a bond between dancing and corns.—*Binghamton Republican*.

It is said that there are over 70,000,000 acres of fertile wheat land in British India, and that over 46,670,000 acres of it have not yet been used for agricultural purposes.

A New Hampshire woman has set out to count the kernels of corn on 50,000 full sized cobs and at last reports she had got through with 3,000 cobs and was not discouraged.

On the last day of 1888 there was 977,000 bushels of wheat in store at Duluth, Minn., against 6,000,000 bushels on the same date last year, and almost 10,000,000 bushels for Dec. 31, 1886.

During a terrific windstorm that passed over Columbus, Ohio, on Jan. 9, a huge chimney crashed through the penitentiary, where E. L. Harper was standing, and the mass just grazed his shoulder.

Fifty-nine new vessels are to be built in the shipyards of the great lakes this winter, eleven of them to be built entirely of steel. They will have a carrying capacity of 100,950 tons and will cost \$7,124,000.

The Sioux City "corn palace," which is to be sent to Washington at the time of the inauguration, will enable the natives of that disfranchised city to see corn in its natural state, before it has flirted with a distillery.—*Ex.*

At the Little Rock, Ark., telephone exchange lately, a call came in from a residence for a feed store.

"Hello!"

"Hello! What is it?"

"Mamma says send up a sack of oats and a bale of hay," in a child's voice.

"Who is it for?" inquired the feed man.

"Why, for the cow, of course," drawled the youngster, and closed up.—*Jove*.

"I found 'Old Hutch' in a downtown restaurant one night last fall," said a Chicago Board of Trade man to a congenial crowd. "He was in a social mood and I asked him to give me the secret of his success, as he certainly must have found the true secret of money-making. He sized me up for a minute and said if I was in earnest he would like to tell me the history of his life. Well, sir, he began from the time he was born and never skipped a single thing regarding his life. He ate three different times while he was regaling me with his story. He began talking about 10 o'clock and kept it up until 3 o'clock the next morning. Then I quit him, as he was only thirteen years old and hadn't made a cent."

Press Comment.

DULUTH'S GRADES.

The grain men of Duluth have labored for years to build up a name and an honorable fame for the wheat graded at Duluth. So far have they succeeded that to-day in the markets of the world no other wheat stands so high, and no other grain is so readily accepted on its stated grade as Duluth No. 1 hard.—*Duluth News*.

STATE GRAIN INSPECTION.

The Minneapolis warehouses should be run under the state inspection law. The law was made to cover that city and Duluth, as terminal points in particular, and if the elevators as now conducted can with impunity fraudulently mix their wheat as they now appear to be doing, there should be such changes enacted at the approaching session of the legislature as will prohibit the practice in future or provide for the rigid punishment of the men who thus prey on the farmers of the state.—*Winona, Minn., Republican*.

VALUE OF AN EXPORT TRADE.

Without a healthy export trade, even on a short crop, we are bound to find ourselves in a cramped condition in a very brief time. It may be considered as a settled fact in the minds of most millers, that an export trade is a necessity in the industry of this country. We have had an opportunity to discover that we have other very considerable competitors in the world's markets. Primarily we make good flour, but the keystone of our success as the world's millers lies in our ability to make good flour cheap.—*Minneapolis Market Record*.

THE VIENNA CORNER IN CORN.

And now comes the news of the collapse of another European corner—that which, under the name of the Hungarian maize ring, had sought to gather all the Indian corn grown on both sides of the Danube and its affluents into its monopolizing granaries, there to be held by the power of combined capital for a price to be arbitrarily determined by the coparceners in the scheme. One dispatch says the loss on this corner had reached 30,000,000 florins. If the gold florin of Germany is meant, this would leave the speculators out of pocket nearly \$40,000,000. The dispatch also says that since the collapse maize can now be purchased at half what the syndicate originally paid therefor.—*Chicago Daily News*.

THE PRICE OF WHEAT.

It is somewhat remarkable that the price of wheat in this market one year ago, two years ago, and three years ago, was virtually the same. The price of No. 2 red winter wheat in elevator one year ago was 92½ cents, two years ago the same price, and three years ago 93 cents. Although the price now is about \$1.01, and generally regarded above an export basis, it cannot be called high, being only about 8 cents per bushel higher than for the corresponding time of the last three years, when both the visible and the invisible were very much larger than at present, and is now reduced to so low a point that conservative parties estimate that for the next six months we can only spare 15,000,000 bushels for export.—*New York Evening Post*.

"JONES OF BINGHAMTON."

"Does advertising pay?" The question is an absurd one, but it is frequently asked. That it does pay, no better illustration is needed than the career of Jones of Binghamton, who was elected, in November, Lieutenant-Governor of New York by a stupendous majority. No newspaper reader in the wide stretch of the United States can truthfully say that the name of Jones of Binghamton is strange to him. For years Jones has been advertising liberally, always announcing his willingness to pay the freight; Jones is now a millionaire, and when he wants an office all he has to do is to let the people know it, and he gets what he is after. Had it not been for advertising, Jones of Binghamton would now be an obscure man, and a poor one. If you want to succeed in life, advertise liberally and pay the freight.—*Ex.*

CANALS VS. RAILWAYS IN FRANCE.

French railways are reported to be suffering from competition with canals. So acute has the situation become that the railways are demanding the reimposition of the tolls taken off the canal traffic in 1880. In that year the French Government abolished all taxation upon canal and river transport, with the result that the total carriage increased from 1,875,000,000 tons carried a kilometer in 1880 to 3,073,000,000 tons carried a similar distance in 1887. In the same period transport by the main lines of the French railway system fell off from 10,964,000,000 tons carried a kilometer in 1880 to 8,967,000,000 tons in 1887. The railways claim that they themselves are heavily taxed on their expenditure, while the large outlay made from public funds on the rivers and canals returns nothing to the public exchequer. Complaint is further made that the cheapness of water carriage stimulates injurious competition by foreigners with home trade. For instance, coal from England, Germany and Belgium reaches the interior of France at rates for carriage which

enable French production to be undersold, and for this privilege the French Government sanctions the annual expenditure of 28,000,000 francs upon waterways.—*Bradstreet's*.

THE MIXING HOUSES.

There is no question that the mixing houses serve a very useful purpose and should be encouraged. They are run by experts and make a good market for grain that has been badly handled. It cannot be successfully disputed that the mixing houses have added much value to the price of poor wheat from the country on this crop. But just where the line between encouragement and discouragement should be drawn for the public good is the fine point to be adjusted. Public elevators cannot successfully compete with private elevators if there is no way to save their grades from the demoralization that would follow the acceptance by the state inspection of "skin grades" of private elevators. And on the other side, for the state to run a double system of inspection, as it is doing, is apparently a discrimination between city mixers and country mixers; for all country houses are to some extent mixing houses.—*Minneapolis Market Record*.

CORN BREAD FOR EUROPE.

Corn is one of the most important articles of our export trade. In 1887 we sent out over 40,000,000 bushels, the total value of which was \$19,374,361. In other years we have nearly doubled this amount. It would surprise one unfamiliar with the facts to know that practically all of this export is used abroad to feed cattle. Of the use of corn in the preparation of table food the foreigner knows nothing. At the present moment the German peasant is paying nearly double the usual price for wheat leaves, or else starving himself on a diet of coarse rye bread. Within his reach is this cheap food, one of the most delicate and nourishing known to the American epicure. He does not use it because he has never been taught to do so. No doubt the obstinate dislike to accepting new ideas, so strange to an American but familiar to every observer of European habits, is largely responsible for this curious fact.—*New York Commercial Advertiser*.

GLORIOUS IOWA.

The biggest crop of corn ever raised in America is now being harvested.

And Iowa stands at the head of all the states in the number of bushels raised in any state.

We put the total yield in the state at 325,000,000 bushels.

At the reasonable price of 25 cents per bushel the corn crop of Iowa is worth more than \$81,000,000.

This is almost equal to the value of all the gold and silver mined in the United States in 1886.

It is \$16,000,000 more than the total net earnings of all the national banks in America, and is almost double the total dividends paid by those banks in 1887.

It is a larger sum than all the railroads in the United States paid in dividends on stock in 1886.

The last census value of farms in Iowa was \$568,000,000.

The capital stock of all the railroads in 1886 was \$3,999,598,509.

The state that can raise 325,000,000 bushels of corn in one season is a rich state, and it must be a prosperous state.

\$81,000,000 for Iowa's corn crop!—*Muscatine Journal*.

SPECULATION VS. ROBBERY.

Selling futures of grain or provisions is as legitimate as selling the cash article. And there is not a Commercial Exchange in this country or Europe but has rules and regulations governing all transactions in futures. That one merchant sells grain for a future delivery (commonly termed option), or that another merchant buys the same (two at least being required to consummate the transaction), neither questions the other's motives. One may be selling against cash grain, either held in the market where the transaction is made, or held at some other point, or he may have sold squarely "short," believing the market to be strained or too high, and that a decline would follow before the option expires. While, on the other hand, the buyer, perhaps a miller, buys against a sale of flour sold for future delivery; or he may be buying, going squarely "long," under the belief the market is depressed and that an advance will follow. If the latter be the case with the purchaser, quite contrary to that of the seller—we see a case in point, where it is well all do not see alike. It is not to be supposed the market will remain at the price the trade is closed at, or is it improbable that both the seller and the buyer may make a profit, or that a loss may be entailed upon each.

The buyer cannot well lose more than the decline to a legitimate shipper or manufacturing basis, neither can the seller in this (St. Louis) market. The rules and regulations of the Merchants' Exchange governing all transactions, protecting the sellers upon the same basis as that of a shipping or manufacturing basis. The rules of the Merchants' Exchange governing this character of trading make the St. Louis market a safe one to trade in.

But how is it in Chicago? An example of the speculative trading in that market develops with the close of the September option, plain and undisputable case of robbery inaugurated and consummated by B. P. Hutchin-

son and his associates. A case of might over right, the rules of the Chicago Board of Trade serving no protection. We maintain that the "cornering" of any article of trade, and forcing prices (not value) to a figure far beyond famine values is as conclusive thievery as that of forcing a man in a corner to hold up his hands while his pockets are being rifled. The unsettling of markets, entailing of losses to innocent merchants, the enhanced value of flour and bread whereby the suffering of the poor is without warrant, and we assert that the Chicago wheat corner of September was as unholy as the projector and manipulator, and should be made to suffer the severest penalty.—*Merchant Miller and Manufacturer*.

WATERWAYS

The Delaware & Raritan Canal was closed for the season Dec. 27.

The official returns show the total tonnage of the Erie Canal in 1888 to have been 4,942,948 tons, a falling off of 610,857 tons from that of 1887.

The contract for constructing the western section of the approaches to the Canadian Sault Ste. Marie Canal has been awarded to Messrs. Allan & Fleming of Ottawa, Ont.

There is one person in France who thinks the Panama Canal is a good thing. It is the old lady who drew the capital prize of £20,000 in the lottery organized to promote the scheme.

The tolls collected on the Illinois & Michigan Canal the past year were sufficient to keep it in repair and pay all expenses. It has been most economically managed, and the canal commissioners show a balance of \$63,325 to the credit of the canal for the year ending Nov. 30, 1888.

The Minnesota Waterways Commission, in its annual report, recommends that the practicability of establishing a waterway from the head of Lake Superior through Rainy Lake River, Rainy Lake, and Lake of the Woods, be investigated. This would give the grain region of the Red River in both countries direct connection with the lakes.

A Canadian exchange says that the work of excavating the St. Lawrence River from Montreal to Quebec, which was commenced in 1844, was recently completed, and where there was formerly only 11 feet of water there is now 27½ feet. Large ocean steamers can now sail up to Montreal, a distance of 600 miles from the mouth of the St. Lawrence.

The tonnage of the Chesapeake & Ohio Canal for 1888 exceeded that of 1887 by 9,125 tons, and for the first time since 1883 the revenue exceeded the expenditures. The accrued revenue for the year was \$129,470, and the expenditures were \$126,770. The canal has \$60,000 coupon bonds overdue, and to save it from ruin it is proposed to extend it from Georgetown, D. C., to Baltimore.

During the season of 1888 there was a decrease of 1,152 in the number of the vessels passing through the Sault Ste. Marie Canal, but there was an increase of 293,061 tons in the registered tonnage, showing an increase of 37 per cent. In the average size of the vessels. The value of the freight tonnage for the season shows an increase of a little over \$3,000,000, the amount being \$82,156,020, as against \$79,031,758 for 1887; \$69,080,072 for 1886, and \$53,413,472 for 1885.

Mr. Wm. H. Morrell of New York was in Chicago recently, in the interest of the canal between Lakes Michigan and Superior. The route proposed is by the Little Bay de Noquet and the Whitefish and Au Train rivers to Lake Superior just east of Marquette. This cut of thirty-six miles would save boats going from Chicago to Duluth, a distance of 542 miles. Mr. Morrell estimates the expense at \$3,000,000 to \$5,000,000, and the time to construct the canal at eighteen months.

The Union for the Improvement of the New York State Canals has asked the legislature to appropriate \$1,000,000 for the continuation of the work of improving the state canals, to be expended before the opening of navigation, 1890. Of this amount, \$550,000 is asked to be expended in deepening and lengthening the locks of the Erie Canal. In 1886 the legislature appropriated \$200,000 for the improvement of the canals; in 1887, \$550,000, and \$570,000 in 1888.

As early as 1780 England attempted to seize the Nicaragua route, and in 1849 a company was formed in Holland to open the same route, and the Spaniards from the first regarded the Nicaragua or the Tehuantepec route more favorably than others. De Lesseps has done all that a man could do to overcome the obstacles at Panama, and failed. In his failure Europe fails to control the isthmus. Since Antonio Galvao proposed his canal scheme to Charles V in 1528, there have been before the public over forty different propositions or schemes to construct a canal across the isthmus.

A paper entitled "Planting Corn with a Shotgun; or, What I Know About Agriculture in the East," will be read at the corn show which opens Jan. 15 in Lincoln, Neb.

THE LAW.

Factors and Brokers—Demand for Margins.

On demand of a commission merchant for margins to cover losses on sales of grain for future delivery, the refusal of the principal to put up any margins until differences are determined, imposes no duty on the agent to immediately buy in the grain to prevent further loss.—*Perin vs. Parker, Illinois Supreme Court*

Agent and Principal.

Where an agent pays money out of his own pocket to protect the estate of a principal that is in his charge he cannot be regarded as a volunteer, and he is entitled to all the equities that his principal would be entitled to had he paid his demand himself. So held by the Kentucky Court of Appeals in the case of *Curry et al. vs. Curry et al.*

Option Dealing—Loan for Gambling Purposes.

The Supreme Court of Indiana has held that a statute of that state making void all notes, bills, etc., the whole or any part of the consideration of which is for money or other valuable thing won by wager, or money lent at the time of such wager for the purpose of being wagered, does not apply to notes executed and payable in New York in pursuance of a transaction engaged in and consummated there, but such notes are governed by the laws of New York. Then, applying the New York law to the notes in question in the suit, the court held that under the New York statute making void all wagers, all contracts for or on account of any money, property, or thing in action wagered, and all securities any part of the consideration of which is money won by playing at any game or by betting thereon, or money knowingly lent at the time and place of such play to any person so playing—a note payable to the maker's own order, and indorsed and negotiated by him for the purpose of raising money for the purpose of dealing in options, is not void in the hands of one who before maturity received it for value, in due course of trade, without notice of the purpose for which it was executed.—*Sondheim vs. Gilbert*

A GREAT WATERWAY SCHEME.

John Arkins and J. M. Burnell of the *Rocky Mountain News* are at present in Chicago. They are here, it is understood, for the purpose of agitating the question of digging a fresh water canal between Denver and the Atlantic seaboard, to touch at Chicago and way stations.

This canal originated in the mind of Mr. Arkins during the fall, and for several weeks completely incapacitated him for campaign work.

With a view of obtaining from him an intelligent presentation of his great undertaking a reporter for the *Times* called upon him last evening. He said:

"The idea is not wholly mine. At least a third of it originated in the brain of my friend and partner, Mr. Burnell here, who, in consideration of the fact, will be given a third interest in the enterprise.

"What Denver needs more than anything else is a water outlet to the Atlantic. There is no reason in the world why she cannot be made a great exporting point. According to the last directory we had twenty-nine old sailors and 358 marines in Denver, every one of whom was at one time a seafaring man. These sailors and marines crossed the plains to Denver in '49, and several of them commanded prairie schooners. Some of them handle schooners now.

"We believe that a channel cut across half the continent, from New York, say, to Denver, can be supplied with 22 feet of water from the ocean, from the great lakes, from the Mississippi, from the Missouri, and from our great mountain streams.

"A company has been organized with a capital of \$185,000,000 to dig this canal. We are ready to go to work and are only waiting now for the water privileges.

"New York capitalists have inquired into the scheme and think it perfectly feasible if we can only tunnel the Alleghenies. We will have no trouble elsewhere, but to cut a tunnel high enough to admit ocean-going vessels you may readily see is difficult undertaking; yet I feel satisfied we can overcome it.

"We propose to make Chicago not only a water but a coaling station. This will make your city a place of some importance. Objections are made that the sewage of Denver will pass through here, but that is nothing. Your city could not possibly smell worse than it does at present.

"I expect to go before the city council to-night and get a franchise. We shall probably want the use of Madison street, as that will be the most direct route to the lake. Our vessels will cross Lake Michigan to St. Joseph, then across the peninsula to Lake Huron, then to Lake Erie, and down through Pennsylvania to New York.

"Denver should have been built on the seashore, but since the present disadvantage was overlooked by the original settlers we propose to remedy it.

"Yes, the *Rocky Mountain News* has the largest circula-

tion of any paper published west of the Ute reservation. It has an affidavit department, and sells advertising space by the square. It is ably edited. I am its editor.

"When the canal is built I shall be glad to have you come out in my private yacht. I am having one built now. It will be vestibuled throughout and carry a night and day crew. Mr. Burnell has the bowsprit in his pocket.

"Yes, come out and see us. We don't make very many pretensions in Denver, but we are going to put up an electric light on Pike's Peak that will illuminate the country from the Rockies to the lakes.

"No, lying is not a penitentiary offense in Colorado. We cannot afford to make it so, being a young state.

"Yes, we have a trunkful of shares up stairs for the press. Burnell, run up and get him a block.

"Well, so long. Come out and see us. We are a pleasant people, but honest and truthful in all our dealings. No, we never accept anything from the press. Here are your shares. First series from 147,983 B to 196 432 B. Don't say anything about this. Good night."—*Chicago Times.*

THE SOWING OF THE BARLEY.

[The following is from the national epic of Finland, and its similarity to Longfellow's *Hiawatha* is so marked that some have accused our great American poet of having plagiarized from the Finnish poem.]

Wainamoinen, wise and ancient,
Brings his magic grains of barley,
Brings he forth his seven seed grains,
Brings them from his trusty pouches,
Fashioned from the skin of squirrel;
Some were made from skin of marten;
Thence to sow his seed he hastens,
Hastes the barley grains to scatter,
Speaks unto himself these measures:

"I the seeds of life am sowing,
Sowing through my open fingers,
From the hand of my Creator,
In this soil enriched with ashes,
In this soil to sprout and flourish.
Ancient mother, thou that livest
Far below the earth and ocean,
Mother of the fields and forests,
Bring the rich soil to producing,
Bring the seed grains to the sprouting,
That the barley will may flourish.
Never will the earth unaided
Yield the ripe, nutritious barley,
Never will her force be wanting
If the givers give assistance,
If the givers grace the sowing,
Grace the daughters of creation.
Rise, O Earth, from out thy slumber,
From the slumberland of ages,
Let the barley grains be sprouting,
Let the blades themselves be starting,
Let the verdant stalks be rising,
Let the ears themselves be growing,
And a hundredfold producing,
From my plowing and my sowing,
From my skilled and honest labor,
Ukko, thou, O God, up yonder,
Thou, O Father of the heavens,
Thou that livest high in Ether,
Curbest all the cloud of heaven,
Holdest in the air thy counsel,
Holdest in the clouds good counsel,
From the East dispatch a cloudlet,
From the Northeast send a rain cloud,
From the West another send us,
From the Northwest still another,
Quickly from the South a warm cloud,
That the rain may fall from heaven,
That the clouds may drop their honey,
That the ears may fill and ripen,
That the barley fields may rustle."

Thereupon benignant Ukko,
Ukko, father of the heavens,
Held his counsel in the cloud place,
Held good counsel in the Ether,
From the East he sent a cloudlet,
From the Northeast sent a rain cloud,
From the West another sent he,
From the Northwest still another,
Quickly from the South a warm cloud,
Joined in seams the clouds together,
Sewed together all their edges,
Grasped the cloud and hurled it earthward.
Quick the rain cloud drops her honey,
Quick the rain drops fall from heaven,
That the ears may quickly ripen,
That the barley crop may rustle.
Straightaway grow the seeds of barley,
From the germ the blade unfolding,
Richly colored ears arising,
From the rich soil of the fallow,
From the work of Wainamoinen.

The elevators at De Witt, Neb., are so full of corn that many loads have to be refused for lack of room.

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The Complete Poultry Manual is a neat little work which is well worth reading by those interested in poultry, or by boys or girls who want to turn an honest penny. The price is only 25 cents. Sent postpaid on receipt of price. Address

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F. N. QUALE, Toledo, Ohio.

WANTED.

A situation by a young man of twenty-seven, as grain buyer in some large elevator, or will act as superintendent. Am a No. 1 judge of all grain and seeds, and can come highly recommended as to character and ability. Speak both German and English. None but responsible parties need apply. Address GRAIN BUYER, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

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FOR SALE.

One Kurth's Double Cylinder Cockle Mill. New. Price at Montevideo \$150. Address

J. A. CASE, Montevideo, Minn.

FOR SALE.

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BUFFALO, "	BATES, "
DAWSON, "	LOAM, "
CANTRAL, "	LOCKE, "

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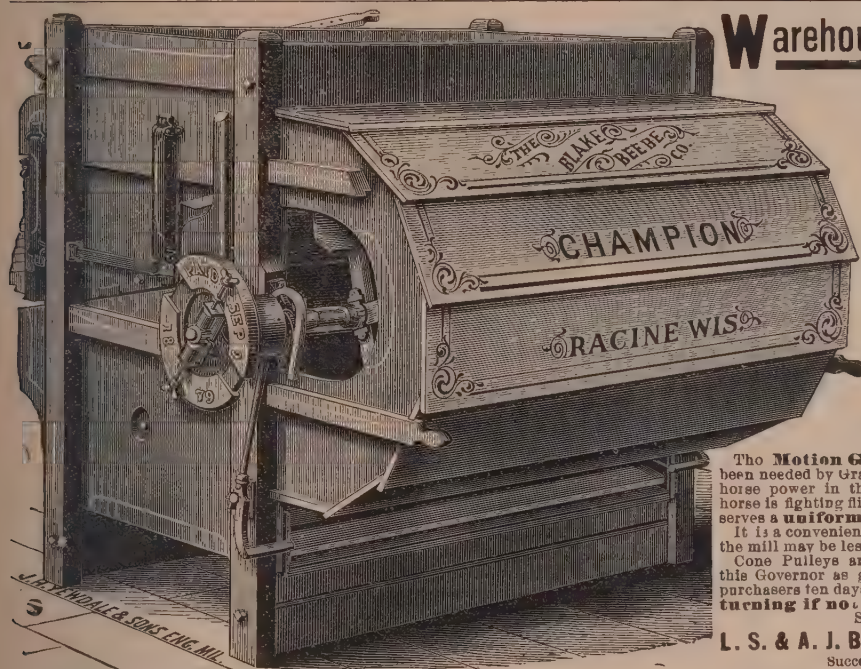
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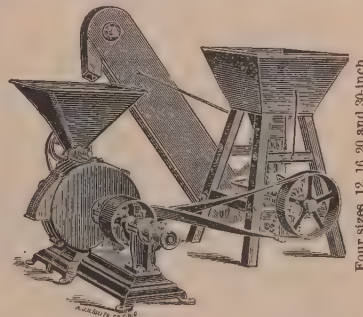
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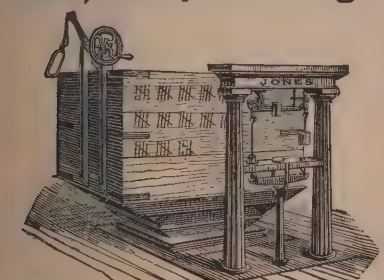
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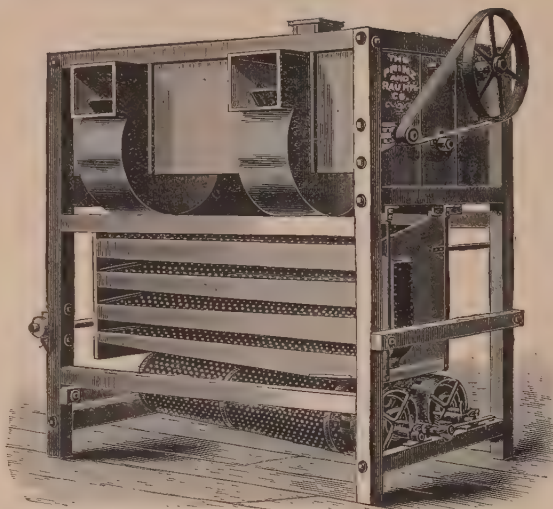
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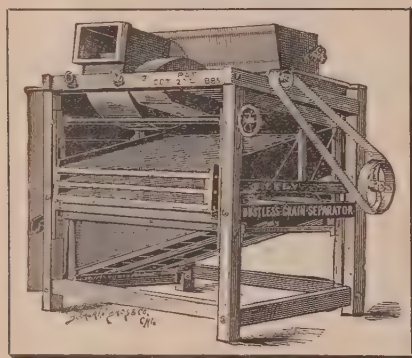
We are always ready to exhibit the machine to parties looking for a good Grader and Separator, and we congratulate you on the improvements made by you, which give it a superiority over all others that we have seen. Your respectfully,

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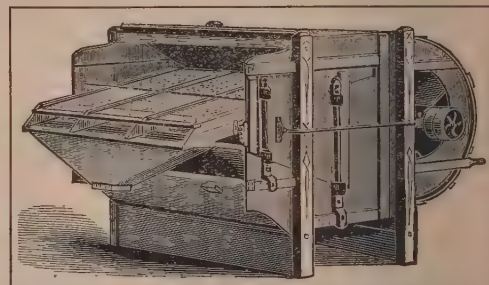
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Are highly recommended for use with horse power, AND WARRANTED TO GIVE BETTER SATISFACTION

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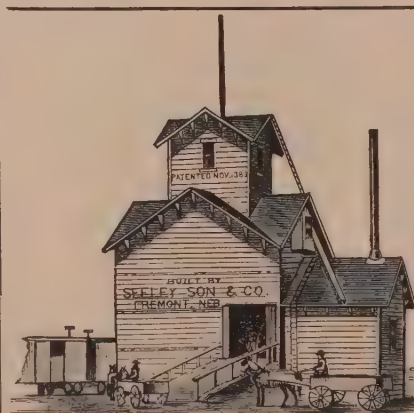
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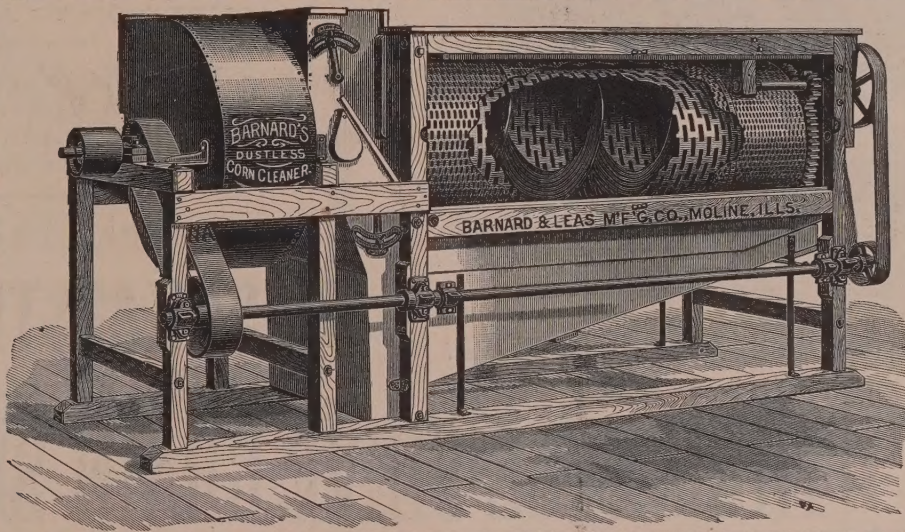
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Dustless Three Sieve
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—AND—
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GENTLEMEN—Enclosed find draft for \$130.00, payment invoice Sheller. Think we have the best Sheller in the market. We have two of your Shellers in use. Would put in the third one if it were not so late in the season. Think we could save corn enough to soon pay for another one. Anyone making inquiry about Shellers, REFER THEM TO ROYER & COON.

Respectfully yours,

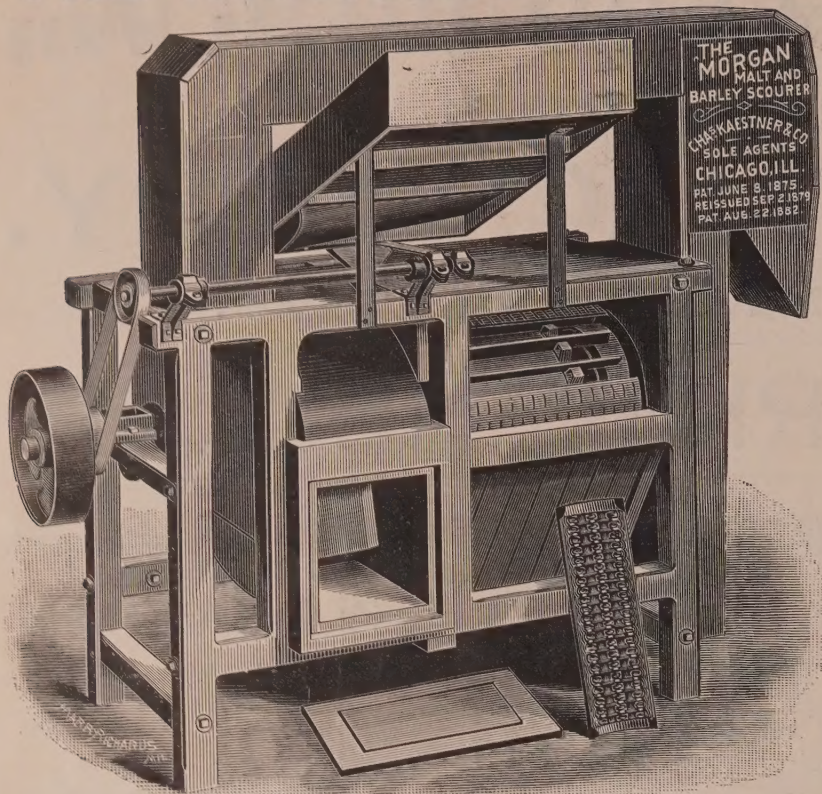
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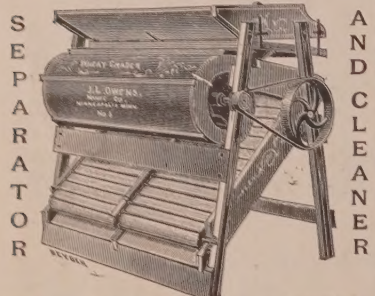
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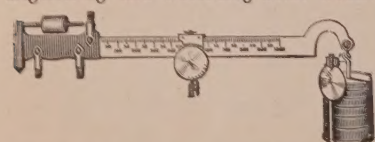
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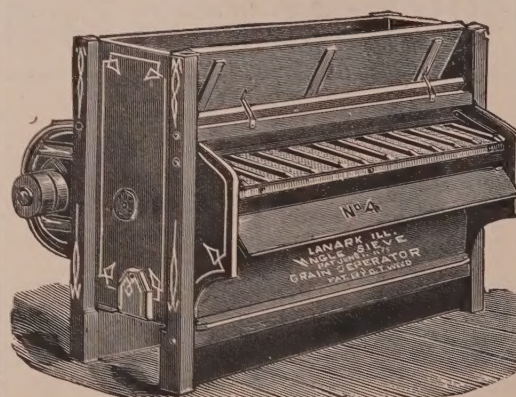


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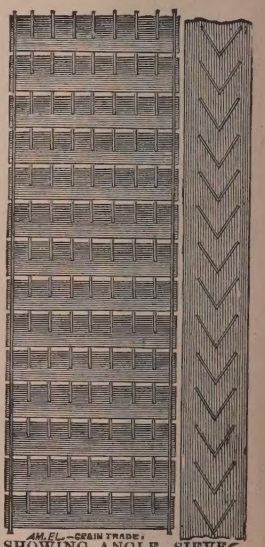
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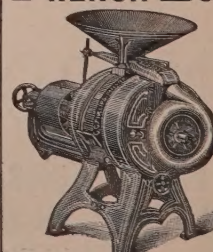
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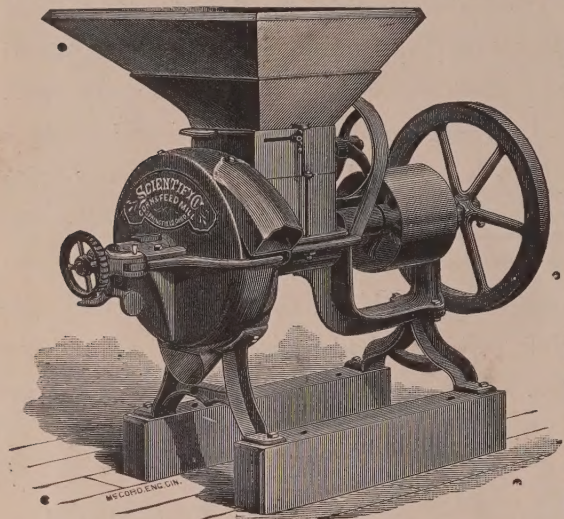
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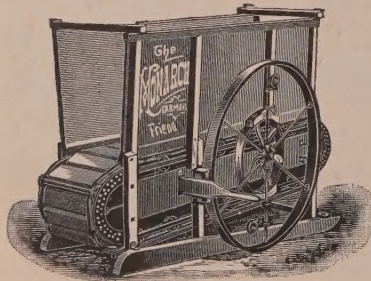
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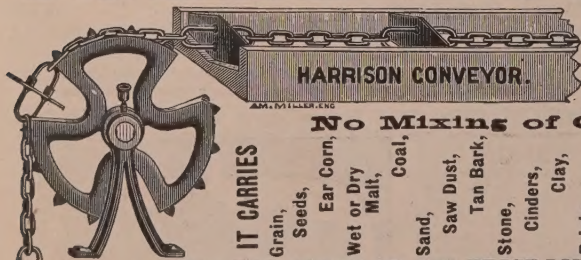
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